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general notes

These tables present data on the demographic and employment characteristics of the Nation's doctoral scientists and engineers. This population consists of individuals in the United States who held science or engineering (S/E) doctorates or who had received doctorates in non-S/E fields but were employed in S/E positions.

The 1981 data presented in this report reflect the results of the fifth survey in this biennial series. The population includes individuals who had received doctorates between January 1, 1938, and June 1980. All surveys in this series encompass a 42-year period of Ph. D. cohorts. Subsequent surveys will continue to take account of new Ph. D. recipients by adding to the sampling frame the two most recent graduating cohorts and deleting the two oldest.

In addition to the detailed statistical results of the 1981 survey, this report contains selected data from the four previous surveys. These time-series tables present data on the total population and the total employed labor force as well as employment data relating to doctoral scientists and engineers in the major employment sectors of the economy; i.e., educational institutions, business and industry, and the Federal Government. Data on employed women are also presented.

Detailed results and technical aspects of the 1981 survey are presented in three sections of this report. The technical notes in section A contain information on the survey methodology, coverage, concepts, definitions, and sampling errors. Section B contains detailed tabulations from the 1981 survey. The questionnaire and specialties list used in the 1981 survey are reproduced in section C.

Requests for additional information should be addressed to John A. Scopino, Demographic Studies Group, Division of Science Resources Studies, National Science Foundation, Washington, D.C. 20550, telephone (202) 634-4664.

time-series tables 1973, 1975, 1977, 1979, and 1981

selected characteristics of doctoral scientists and engineers

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TABLE 1. CHARACTERISTICS OF THE TOTAL POPULATION OF DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S.

CHARACTERISTICS	1973		1975		1977		1979		1981	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
TOTAL	238,513	100.0	270,477	100.0	303,267	100.0	332,280	100.0	363,866	100.0
FIELD										
PHYSICAL SCIENTISTS	53,012	22.2	58,445	21.6	62,044	20.5	64,318	19.4	67,693	18.6
CHEMISTS	33,920	14.2	38,422	14.2	40,639	13.4	42,654	12.8	45,376	12.5
PHYSICISTS/ASTRONOMERS	19,092	8.0	20,023	7.4	21,405	7.1	21,664	6.5	22,317	6.1
MATHEMATICAL SCIENTISTS	13,084	5.5	14,236	5.3	15,406	5.1	16,060	4.8	16,470	4.5
MATHEMATICIANS	11,581	4.8	12,474	4.6	13,665	4.5	13,642	4.1	13,819	3.8
STATISTICIANS	1,503	.6	1,762	.7	1,741	.6	2,418	.7	2,651	.7
COMPUTER SPECIALISTS	2,726	1.1	3,498	1.3	5,822	1.9	6,758	2.0	9,066	2.5
ENVIRONMENTAL SCIENTISTS	10,926	4.6	12,478	4.6	13,543	4.5	15,078	4.5	16,589	4.6
EARTH SCIENTISTS	9,074	3.8	9,836	3.6	10,235	3.4	11,587	3.5	12,605	3.5
OCEANOGRAPHERS	1,196	.5	1,311	.5	1,592	.5	1,685	.5	1,818	.5
ATMOSPHERIC SCIENTISTS	656	.3	1,331	.5	1,716	.6	1,806	.5	2,166	.6
ENGINEERS	37,261	15.6	43,445	16.1	46,539	15.3	51,532	15.5	58,311	16.0
LIFE SCIENTISTS	63,583	26.6	70,256	26.0	78,346	25.8	86,322	26.0	93,848	25.8
BIOLOGICAL SCIENTISTS	40,673	17.0	42,741	15.8	46,792	15.4	50,012	15.1	54,442	15.0
AGRICULTURAL SCIENTISTS	11,408	4.8	13,515	5.0	15,062	5.0	16,093	4.8	17,270	4.7
MEDICAL SCIENTISTS	11,502	4.8	13,996	5.2	16,492	5.4	20,217	6.1	22,136	6.1
PSYCHOLOGISTS	27,151	11.4	31,358	11.6	35,718	11.8	40,262	12.1	45,416	12.5
SOCIAL SCIENTISTS	31,170	13.0	36,757	13.6	45,849	15.1	51,950	15.6	5,473	15.5
ECONOMISTS	9,316	3.9	10,640	3.9	11,689	3.9	12,512	3.8	14,294	3.9
SOCIOLOGISTS/ANTHRO.	7,219	3.0	8,521	3.2	10,352	3.4	11,053	3.3	11,909	3.3
OTHER SOCIAL SCIENTISTS	14,635	6.1	17,596	6.5	23,808	7.9	28,385	8.5	30,270	8.3
SEX										
MEN	218,042	91.3	244,908	90.5	271,594	89.6	294,371	88.6	318,119	87.4
WOMEN	20,871	8.7	25,569	9.5	31,673	10.4	37,909	11.4	45,747	12.6
RACE										
WHITE	217,112	90.9	242,408	89.6	270,550	89.2	293,451	88.3	322,853	88.7
BLACK	2,242	.9	2,631	1.0	2,865	.9	3,707	1.1	4,609	1.3
AMERICAN INDIAN	435	.2	510	.2	659	.2	984	.3	2,325	.6
ASIAN	9,619	4.0	13,077	4.8	15,789	5.2	21,694	6.5	27,857	7.7
NO REPORT	9,505	4.0	11,851	4.4	13,404	4.4	12,424	3.7	6,222	1.7
AGE										
UNDER 30	10,145	4.2	9,826	3.6	8,865	2.9	7,851	2.4	8,591	2.4
30-34	52,088	21.8	56,536	21.1	55,481	18.3	54,663	16.5	52,793	14.5
35-39	43,609	18.3	54,528	20.2	68,745	22.7	77,415	23.3	78,623	21.6
40-44	36,760	15.4	40,675	15.0	46,273	15.3	55,125	16.6	68,616	18.9
45-49	31,257	13.1	34,300	12.7	38,688	12.8	40,728	12.3	44,839	12.3
50-54	25,307	10.6	29,365	10.9	31,942	10.5	33,855	10.2	37,431	10.3
55-59	16,802	7.0	19,168	7.1	23,831	7.9	27,524	8.3	31,211	8.6
60-64	10,476	4.4	12,548	4.6	14,844	4.9	17,812	5.4	21,258	5.8
65 & OVER	12,054	5.0	12,725	4.7	14,142	4.7	16,646	5.0	20,435	5.6
NO REPORT	415	.2	398	.1	456	.2	575	.2	69	*
EMPLOYMENT STATUS										
FULL-TIME EMPLOYED	208,447	87.2	240,563	88.9	267,073	88.1	292,855	88.1	322,259	88.6
SCIENCE/ENGINEERING	195,142	81.7	225,840	83.5	245,271	80.9	268,164	80.7	294,525	80.9
OTHER/UNKNOWN FIELD	13,305	5.6	14,723	5.4	21,802	7.2	24,691	7.4	27,734	7.6
PART-TIME EMPLOYED	6,287	2.6	7,327	2.7	7,484	2.5	10,683	3.2	10,735	3.0
SCIENCE/ENGINEERING	5,450	2.3	6,231	2.3	6,349	2.1	8,986	2.7	9,108	2.5
OTHER/UNKNOWN FIELD	837	.4	1,096	.4	1,135	.4	1,697	.5	1,627	.4
POSTDOCTORATES	5,676	2.4	8,155	3.0	9,755	3.2	10,198	3.1	10,544	2.9
UNEMPLOYED/SEEKING	2,514	1.1	2,477	.9	3,312	1.1	2,928	.9	2,646	.7
NOT EMPLOYED/NOT SEEKING	1,454	.6	2,374	.9	2,834	.9	3,567	1.1	3,387	.9
RETIRED	6,962	2.9	8,652	3.2	9,754	3.2	10,345	3.1	12,530	3.4
OTHER	2,305	1.0	440	.2	540	.2	847	.3	397	.1
NO REPORT	5,268	2.2	485	.2	2,515	.8	853	.3	1,368	.4

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING.
SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE 2. SELECTED CHARACTERISTICS OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S.

CHARACTERISTICS	1973			1975			1977			1979			1981		
	NUMBER	PERCENT	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	MEDIAN ANNUAL SALARY
TOTAL	220,410	100.0	20,700	256,045	100.0	23,200	284,312	100.0	25,600	313,736	100.0	29,100	343,538	100.0	34,700
FIELD															
PHYSICAL SCIENTISTS	48,470	22.0	21,000	54,638	21.3	23,900	57,462	20.2	26,600	60,170	19.2	30,300	63,189	18.4	36,200
CHEMISTS	30,704	13.9	21,000	35,812	14.0	24,000	37,318	13.1	26,600	39,569	12.6	30,400	41,971	12.2	36,200
PHYSICISTS/ASTRONOMERS	17,766	8.1	21,000	18,826	7.4	23,700	20,144	7.1	26,500	20,601	6.6	30,100	21,218	6.2	36,100
MATHEMATICAL SCIENTISTS	12,145	5.5	19,200	13,639	5.3	21,200	14,588	5.1	23,300	15,297	4.9	26,300	15,594	4.5	31,300
MATHEMATICIANS	10,686	4.8	19,000	11,898	4.6	20,900	12,875	4.5	23,100	12,930	4.1	26,100	13,038	3.8	30,900
STATISTICIANS	1,459	.7	20,900	1,741	.7	23,100	1,713	.6	25,100	2,367	.8	29,300	2,556	.7	34,600
COMPUTER SPECIALISTS	2,692	1.2	21,700	3,496	1.4	23,500	5,767	2.0	25,800	6,739	2.1	28,500	9,048	2.6	34,400
ENVIRONMENTAL SCIENTISTS	10,325	4.7	20,700	12,126	4.7	23,500	13,026	4.6	25,800	14,609	4.7	30,300	16,029	4.7	36,500
EARTH SCIENTISTS	8,556	3.9	20,700	9,531	3.7	23,600	9,765	3.4	25,900	11,144	3.6	30,300	12,121	3.5	37,000
OCEANOGRAPHERS	1,130	.5	19,700	1,277	.5	22,100	1,563	.5	24,100	1,662	.5	28,800	1,782	.5	32,100
ATMOSPHERIC SCIENTISTS	639	.3	22,500	1,318	.5	24,200	1,698	.6	28,300	1,803	.6	31,300	2,126	.6	36,300
ENGINEERS	35,775	16.2	22,300	42,410	16.6	25,200	45,046	15.8	28,600	50,222	16.0	33,100	56,953	16.6	40,200
LIFE SCIENTISTS	58,047	26.3	20,100	65,184	25.5	22,300	71,939	25.3	24,700	80,090	25.5	28,100	86,715	25.2	33,200
BIOLOGICAL SCIENTISTS	36,859	16.7	19,400	39,076	15.3	21,300	42,165	14.9	23,800	45,746	14.6	26,500	49,673	14.5	31,600
AGRICULTURAL SCIENTISTS	10,553	4.8	19,900	12,924	5.0	22,100	14,293	5.0	24,800	15,061	4.8	29,000	15,879	4.6	33,600
MEDICAL SCIENTISTS	10,635	4.8	22,700	13,184	5.1	25,700	15,481	5.4	28,000	19,283	6.1	30,900	21,163	6.2	37,900
PSYCHOLOGISTS	24,850	11.3	20,200	30,073	11.7	22,100	33,743	11.9	24,100	37,987	12.1	26,700	43,064	12.5	30,700
SOCIAL SCIENTISTS	28,106	12.8	20,300	34,479	13.5	22,100	42,741	15.0	24,100	48,622	15.5	26,200	52,946	15.4	30,800
ECONOMISTS	8,289	3.8	22,200	9,878	3.9	24,500	10,792	3.8	27,000	11,718	3.7	31,000	13,426	3.9	36,500
SOCIOLOGISTS/ANTHRO.	6,530	3.0	19,300	7,930	3.1	20,700	9,493	3.3	22,200	10,224	3.3	23,900	10,998	3.2	28,500
OTHER SOCIAL SCIENTISTS	13,287	6.0	19,500	16,671	6.5	21,100	22,456	7.9	23,200	26,680	8.5	25,300	28,322	8.3	29,900
SEX															
MEN	203,452	92.3	21,000	233,932	91.4	23,500	256,808	90.3	26,000	280,393	89.4	29,900	302,596	88.1	35,600
WOMEN	16,958	7.7	17,300	22,113	8.6	19,100	27,504	9.7	20,700	33,343	10.6	23,100	40,942	11.9	27,000
RACE															
WHITE	200,878	91.1	20,800	229,760	89.7	23,300	253,582	89.2	25,700	276,872	88.2	29,200	304,398	88.6	34,800
BLACK	2,089	.9	20,900	2,516	1.0	23,000	2,770	1.0	23,800	3,420	1.1	26,600	4,320	1.3	31,700
AMERICAN INDIAN	390	.2	19,200	495	.2	21,100	623	.2	24,100	926	.3	25,800	2,198	.6	35,500
ASIAN	9,144	4.1	19,600	12,709	5.0	21,500	15,324	5.4	23,800	21,031	6.7	28,200	26,877	7.8	34,200
NO REPORT	[illegible]	3.6	20,300	10,565	4.1	23,100	12,013	4.2	25,700	11,487	3.7	29,800	5,745	1.7	35,900
AGE															
UNDER 30	[illegible]	4.4	15,400	9,523	3.7	16,900	8,476	3.0	18,500	7,476	2.4	21,300	8,355	2.4	25,900
30-34	49,717	22.6	17,300	55,223	21.6	18,800	53,582	18.8	20,400	52,703	16.8	22,800	51,275	14.9	27,500
35-39	42,069	19.1	19,600	53,493	20.9	21,500	66,724	23.5	23,600	75,887	24.2	26,600	76,901	22.4	31,400
40-44	35,318	16.0	21,800	40,058	15.6	[illegible]	45,146	15.9	26,500	54,296	17.3	30,200	67,516	19.7	35,500
45-49	29,938	13.6	24,100	33,648	13.1	26,200	37,672	13.3	29,200	39,860	12.7	32,000	44,006	12.8	37,600
50-54	24,109	10.9	24,900	28,682	11.2	28,100	30,935	10.9	30,900	33,104	10.6	34,100	36,467	10.6	40,200
55-59	15,581	7.1	25,200	18,431	7.2	28,200	22,533	7.9	31,500	26,501	8.4	36,100	29,912	8.7	41,500
60-64	8,987	4.1	25,500	11,201	4.4	28,600	12,964	4.6	31,400	15,438	4.9	36,000	18,811	5.5	41,100
65 & OVER	4,876	2.2	24,700	5,481	2.1	27,600	5,974	2.1	31,200	7,951	2.5	36,300	10,262	3.0	42,000
NO REPORT	151	.1	24,200	245	.1	23,500	306	.1	26,800	520	.2	23,100	33	*	**
TYPE OF EMPLOYMENT															
SCIENCE/ENGINEERING	206,230	93.6	20,700	240,100	93.8	23,100	261,099	91.8	25,500	287,082	91.5	29,000	314,017	91.4	34,600
OTHER/UNKNOWN FIELD	14,180	6.4	22,600	15,945	6.2	24,300	23,213	8.2	27,200	26,654	8.5	30,600	29,521	8.6	36,600
SECTOR OF EMPLOYMENT															
BUSINESS/INDUSTRY	53,403	24.2	23,300	64,627	25.2	26,000	71,475	25.1	29,900	82,824	26.4	33,800	99,070	28.8	40,300
EDUCATIONAL INSTITUTIONS	129,408	58.7	19,100	149,184	58.3	21,400	163,140	57.4	23,700	173,966	55.4	26,400	186,809	54.4	31,100
4-YEAR COLLEGES/UNIV.	124,901	56.7	19,200	143,701	56.1	21,500	156,491	55.0	23,800	166,985	53.2	26,400	179,010	52.1	31,300
2-YEAR COLLEGES	2,962	1.3	17,800	3,567	1.4	19,100	4,634	1.6	20,900	4,512	1.4	24,600	5,035	1.5	28,200
ELEMENTARY/SEC. SCHOOLS	1,545	.7	19,300	1,916	.7	20,500	2,015	.7	22,400	2,469	.8	25,800	2,764	.8	28,700
HOSPITALS/CLINICS	4,543	2.1	19,400	7,469	2.9	21,800	8,587	3.0	23,600	9,706	3.1	26,200	9,862	2.9	31,000
NONPROFIT ORGANIZATIONS	8,006	3.6	21,700	8,337	3.3	24,400	10,198	3.6	26,800	12,549	4.0	30,300	12,581	3.7	34,800
FEDERAL GOVERNMENT	18,100	8.3	23,500	18,995	7.4	26,300	21,369	7.5	29,700	23,923	7.6	33,400	25,087	7.3	40,300
MILITARY/COMM. CORPS	1,977	.9	**	2,130	.8	**	2,282	.8	**	2,304	.7	**	2,052	.6	**
STATE GOVERNMENT	3,001	1.4	19,400	3,015	1.2	20,900	3,783	1.3	21,600	4,175	1.3	23,500	4,454	1.3	29,300
OTHER GOVERNMENT	1,255	.6	19,000	1,880	.7	22,900	1,545	.5	22,100	1,943	.6	23,800	2,068	.6	27,200
OTHER	331	.2	21,000	82	*	**	584	.2	37,500	945	.3	42,700	992	.3	61,500
NO REPORT	286	.1	**	326	.1	**	1,350	.5	**	1,401	.4	**	613	.2	**
PRIMARY WORK ACTIVITY															
RESEARCH AND DEVELOPMENT	71,560	32.4	20,500	82,360	32.2	23,000	93,477	32.9	25,600	99,701	31.8	29,200	120,108	35.0	35,200
BASIC RESEARCH	34,258	15.5	19,900	38,144	14.9	22,200	43,549	15.3	24,600	47,864	15.3	27,700	55,265	16.1	33,100
APPLIED RESEARCH	28,700	13.0	20,800	32,885	12.8	23,400	36,426	12.8	26,300	36,842	11.7	30,000	46,475	13.5	36,000
DEVELOPMENT	8,502	3.9	20,800	11,331	4.4	23,600	13,502	4.7	26,100	14,995	4.8	30,800	18,368	5.3	36,500
MANAGEMENT/ADMINISTRATION†	46,172	20.9	26,000	51,778	20.2	29,600	60,478	21.3	31,900	72,224	23.0	35,000	60,312	17.6	43,200
OF R&D	26,223	11.9	26,200	28,669	11.2	30,100	30,737	10.8	33,100	43,042	13.7	35,900	32,649	9.5	45,800
OF OTHER	19,949	9.1	25,700	23,109	9.0	28,600	29,741	10.5	30,600	29,182	9.3	32,400	27,663	8.1	39,900
TEACHING	80,012	36.3	18,600	91,159	35.6	20,600	90,413	31.8	22,600	91,922	29.3	25,200	104,956	30.6	30,100
CONSULTING	4,055	1.8	22,500	5,516	2.2	25,500	6,141	2.2	28,200	8,998	2.9	31,300	12,035	3.5	39,500
SALES/PROF. SERVICES	8,064	3.7	20,600	11,672	4.6	21,900	15,194	5.3	24,700	21,049	6.7	29,000	25,724	7.5	34,900
OTHER	6,959	3.2	20,600	7,482	2.9	22,100	12,785	4.5	24,700	15,679	5.0	30,100	16,441	4.8	34,600
NO REPORT	3,688	1.7	21,600	6,078	2.4	23,700	5,824	2.0	25,400	4,163	1.3	29,900	3,962	1.2	35,200
FEDERAL SUPPORT STATUS															
RECEIVING SUPPORT	99,558	45.2	21,400	110,168	43.0	24,100	119,654	42.1	26,500	126,496	40.3	30,200	126,704	36.9	35,500
NO SUPPORT	110,905	50.3	20,400	136,939	53.5	22,700	152,706	53.7	25,000	170,726	54.4	28,500	160,734	46.8	34,000
STATUS UNKNOWN	6,846	3.1	17,900	6,652	2.6	19,800	7,487	2.6	21,700	9,207	2.9	24,700	6,373	1.9	28,700
NO REPORT	3,101	1.4	22,600	2,286	.9	22,300	4,465	1.6	24,700	7,307	2.3	30,800	49,727	14.5	36,000

*LESS THAN .05 PERCENT

**NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.

†THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES WAS CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITIES," P. 12 FOR EXPLANATION.

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARIES COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

SOURCE: NATIONAL SCIENCE FOUNDATION

BEST COPY AVAILABLE

TABLE 3. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED BY EDUCATIONAL INSTITUTIONS

CHARACTERISTICS	1973				1975				1977				1979				1981			
	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY
TOTAL	129,408	100.0	58.7	19,100	149,164	100.0	58.3	21,400	163,140	100.0	57.4	23,700	173,966	100.0	55.4	26,400	186,809	100.0	54.6	31,100
FIELD																				
PHYSICAL SCIENTISTS	21,968	17.0	45.3	18,300	25,681	17.2	47.0	21,100	27,089	16.6	47.1	23,600	27,248	15.7	45.3	26,500	28,333	15.2	44.8	31,700
CHEMISTS	11,877	9.2	38.7	17,900	14,229	9.5	39.7	20,600	14,792	9.1	35.6	22,800	15,134	8.7	38.2	25,400	15,772	8.4	37.6	30,700
PHYSICISTS/ASTRONOMERS	10,091	7.8	56.8	18,900	11,452	7.7	60.8	22,000	12,297	7.5	61.0	24,400	12,114	7.0	58.8	27,700	12,561	6.7	59.2	33,500
MATHEMATICAL SCIENTISTS	10,461	8.1	86.1	18,600	11,733	7.9	86.0	20,500	12,232	7.5	83.8	22,700	12,606	7.2	82.4	25,500	12,739	6.8	81.7	30,500
MATHEMATICIANS	9,399	7.3	88.0	18,400	10,423	7.0	87.6	20,400	11,022	6.8	85.6	22,600	10,794	6.2	83.5	25,300	11,007	5.9	86.6	30,400
STATISTICIANS	1,062	.8	72.8	19,800	1,310	.9	75.2	22,200	1,210	.7	70.6	23,200	1,812	1.0	76.6	26,700	1,732	.9	67.8	31,300
COMPUTER SPECIALISTS	1,374	1.1	51.0	21,100	1,700	1.1	48.6	22,700	2,128	1.3	36.9	24,400	2,457	1.4	36.5	25,400	3,010	1.6	33.3	30,700
ENVIRONMENTAL SCIENTISTS	5,194	4.0	50.3	18,800	5,976	4.0	49.3	21,000	6,312	3.9	48.5	23,600	6,182	3.6	42.3	26,700	6,772	3.6	42.2	31,200
EARTH SCIENTISTS	4,195	3.2	49.1	18,800	4,619	3.1	48.5	20,900	4,641	2.8	47.5	23,400	4,654	2.7	41.8	26,700	5,019	2.7	41.6	31,600
OCEANOGRAPHERS	689	.5	61.0	19,200	800	.5	62.6	19,600	971	.6	62.1	23,600	789	.5	47.5	26,700	964	.5	54.1	28,500
ATMOSPHERIC SCIENTISTS	306	.2	47.9	21,500	557	.4	42.3	23,100	700	.4	41.2	25,200	739	.4	41.0	27,300	789	.4	37.1	31,500
ENGINEERS	13,016	10.1	36.4	20,600	14,903	10.0	35.1	23,600	15,911	9.8	35.3	26,500	17,048	9.8	33.9	30,000	18,083	9.7	31.8	36,400
LIFE SCIENTISTS	39,242	30.3	67.6	18,900	43,752	29.4	67.2	20,900	47,475	29.1	66.0	23,500	52,207	30.0	65.2	26,400	56,787	30.4	65.5	31,000
BIOLOGICAL SCIENTISTS	26,837	20.7	72.8	18,500	28,853	19.4	73.9	20,400	30,833	18.9	73.1	22,800	32,998	19.0	72.1	25,200	35,840	19.2	72.2	29,900
AGRICULTURAL SCIENTISTS	6,563	5.1	62.2	18,700	7,840	5.3	60.7	21,000	8,331	5.1	58.3	23,700	8,510	4.9	56.5	27,500	9,147	4.9	57.6	31,400
MEDICAL SCIENTISTS	5,842	4.5	54.9	21,200	7,059	4.7	53.5	24,100	8,311	5.1	53.7	25,800	10,699	6.2	55.5	29,900	11,800	6.3	55.8	35,400
PSYCHOLOGISTS	15,106	11.7	60.8	19,200	17,703	11.9	58.9	21,000	18,561	11.4	55.1	22,700	19,949	11.5	52.5	25,600	21,833	11.7	50.7	29,100
SOCIAL SCIENTISTS	23,047	17.8	82.0	19,500	27,656	18.6	80.3	21,200	33,412	20.5	78.2	23,100	36,269	20.8	74.6	25,400	39,252	21.0	76.1	29,700
ECONOMISTS	6,060	4.7	73.1	20,800	6,915	4.6	70.0	22,800	7,498	4.6	69.5	25,100	7,679	4.4	65.5	28,300	9,017	4.8	67.2	33,200
SOCIOLOGISTS/ANTHRO	6,001	4.6	91.9	19,200	7,354	4.9	92.7	20,500	8,547	5.2	90.0	22,100	8,787	5.1	85.9	23,900	9,285	5.0	84.4	28,400
OTHER SOCIAL SCIENTISTS	10,986	8.5	82.7	18,800	13,427	9.0	80.5	20,400	17,367	10.6	77.3	22,700	19,803	11.4	74.2	24,900	20,950	11.2	73.5	29,100
SEX																				
MEN	117,248	90.6	57.6	19,400	133,648	89.6	57.1	21,800	144,365	88.5	56.2	24,100	152,072	87.4	54.2	26,900	161,020	86.2	53.2	32,000
WOMEN	12,160	9.4	71.7	16,800	15,536	10.4	70.3	18,500	18,775	11.5	68.3	20,000	21,894	12.6	65.7	22,300	25,789	13.8	63.0	25,700
RACE																				
WHITE	117,359	90.7	58.4	19,200	133,927	89.8	58.3	21,400	146,156	89.6	57.7	23,700	154,604	88.9	55.3	26,400	167,147	89.5	54.9	31,200
BLACK	1,403	1.1	67.2	19,800	1,716	1.2	68.2	22,000	1,804	1.1	65.1	22,200	2,165	1.2	63.3	24,700	2,892	1.5	66.9	30,200
AMERICAN INDIAN	283	.2	72.6	19,000	309	.2	62.4	20,500	362	.2	58.1	23,600	618	.4	66.7	25,100	1,204	.6	54.8	31,300
ASIAN	5,171	4.0	56.6	18,200	6,706	4.5	52.8	20,500	7,376	4.5	48.1	22,500	9,876	5.7	47.0	25,300	12,030	6.4	44.8	30,600
NO REPORT	5,192	4.0	65.6	19,300	6,526	4.4	61.8	22,100	7,402	4.5	61.6	24,200	6,703	3.9	58.4	27,500	3,536	1.9	61.5	30,900
AGE																				
UNDER 30	5,857	4.6	61.0	14,500	5,803	3.9	60.9	15,800	5,425	3.3	64.0	17,500	4,511	2.6	60.3	19,100	4,641	2.5	55.5	22,200
30-34	29,040	22.4	58.4	15,900	31,289	21.0	56.7	17,500	30,130	18.5	56.2	18,700	28,430	16.3	53.9	20,600	27,806	14.9	54.2	24,000
35-39	24,924	19.3	59.2	18,200	31,019	20.8	58.0	19,800	37,219	22.8	55.8	21,600	39,857	22.9	52.5	23,800	38,173	20.4	49.6	27,600
40-44	20,802	16.1	58.9	20,200	23,633	15.8	59.0	22,400	25,832	15.8	57.2	24,500	29,279	16.8	53.9	27,500	35,876	19.2	53.1	31,400
45-49	17,522	13.5	58.5	22,400	20,004	13.4	59.5	24,500	22,207	13.6	58.9	26,600	23,396	13.4	58.7	29,500	24,444	13.1	55.5	34,600
50-54	13,698	10.6	56.8	23,500	16,473	11.0	57.4	26,300	17,901	11.0	57.9	29,300	19,375	11.1	58.5	31,300	21,320	11.4	58.5	36,400
55-59	8,973	6.9	57.6	23,800	10,986	7.4	59.6	26,300	13,131	8.0	58.3	29,900	15,726	8.9	58.6	33,100	17,375	9.3	58.1	38,900
60-64	5,504	4.3	61.2	24,600	6,713	4.5	59.6	26,700	7,709	4.7	59.5	30,400	9,212	5.3	59.7	34,000	11,218	6.0	59.6	39,600
65 & OVER	2,992	2.3	61.4	24,100	3,164	2.1	57.7	27,100	3,421	2.1	57.3	30,600	4,158	2.4	52.3	35,300	5,934	3.2	57.8	40,500
NO REPORT	56	*	37.1	**	100	.1	40.8	**	165	.1	53.9	24,300	242	.1	46.5	**	24	*	72.7	**
TYPE OF EMPLOYMENT																				
SCIENCE/ENGINEERING	121,643	94.0	59.0	19,100	140,318	94.1	58.4	21,300	151,183	92.7	57.9	23,500	160,479	92.2	55.5	26,300	172,721	92.5	55.0	30,900
OTHER/UNKNOWN FIELD	7,765	6.0	54.8	20,700	8,866	5.9	55.6	23,300	11,957	7.3	51.5	25,300	13,487	7.8	50.6	28,100	14,088	7.5	67.7	34,300
PRIMARY WORK ACTIVITY																				
RESEARCH AND DEVELOPMENT	30,716	23.7	43.0	18,800	35,008	23.5	43.2	21,200	42,623	26.1	45.6	23,700	46,645	26.9	47.0	26,400	52,634	28.2	43.8	31,600
BASIC RESEARCH	22,484	17.4	65.6	18,700	25,348	17.0	66.5	20,900	30,043	18.4	65.0	23,400	33,241	19.1	69.4	26,300	37,895	20.3	68.6	31,100
APPLIED RESEARCH	7,616	5.9	26.5	18,500	9,570	6.4	29.1	21,500	11,078	6.8	30.4	24,200	12,535	7.2	34.0	26,700	13,698	7.3	29.5	32,500
DEVELOPMENT	616	.5	7.2	18,500	650	.5	6.1	22,500	1,502	.9	11.1	22,200	1,069	.6	7.1	25,300	1,041	.6	5.7	31,700
MANAGEMENT/ADMINISTRATION†	13,627	10.5	29.5	24,600	15,450	10.4	25.8	27,700	20,036	12.3	33.1	30,200	26,493	15.2	36.7	31,200	18,840	10.1	31.2	39,500
OF R&D	4,548	3.5	17.3	23,800	5,146	3.4	17.9	28,000	6,135	3.8	20.0	30,500	8,259	4.7	19.2	32,300	4,365	2.3	13.4	42,600
OF OTHER	9,079	7.0	45.5	24,900	10,304	6.9	44.6	27,500	13,901	8.5	46.7	30,000	18,234	10.5	62.5	30,900	14,475	7.7	52.3	38,900
TEACHING	78,940	61.0	98.7	18,600	90,339	60.6	99.1	20,600	89,307	54.7	98.8	22,600	90,863	52.2	98.6	25,200	103,905	55.6	99.0	30,000
CONSULTING	544	.4	13.4	18,700	547	.4	9.9	22,700	955	.6	15.6	24,000	943	.5	10.5	28,100	984	.5	8.2	32,700
SALES/PROF. SERVICES	1,672	1.3	20.7	18,700	2,562	1.7	21.9	19,900	3,263	2.0	21.5	22,200	3,770	2.2	17.9	26,300	4,933	2.6	19.2	30,400
OTHER	1,775	1.4	25.5	20,300	1,271	.9	17.0	19,500	4,279	2.6	33.5	23,800	3,775	2.2	24.1	28,200	3,628	1.9	22.1	32,000
NO REPORT	2,134	1.6	57.9	20,500	3,407	2.3	56.1	22,300	2,677	1.6	46.0	24,900	1,277	.7	30.7	29,200	1,885	1.0	47.6	34,300

*LESS THAN .05 PERCENT

**NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.

†THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES WAS CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITIES," P. 12 FOR EXPLANATION.

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARIES COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 4. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED IN BUSINESS AND INDUSTRY

CHARACTERISTICS	1973 NUMBER	1973 PERCENT	1973 % OF TOTAL EMPLD	1973 MEDIAN ANNUAL SALARY	1975 NUMBER	1975 PERCENT	1975 % OF TOTAL EMPLD	1975 MEDIAN ANNUAL SALARY	1977 NUMBER	1977 PERCENT	1977 % OF TOTAL EMPLD	1977 MEDIAN ANNUAL SALARY	1979 NUMBER	1979 PERCENT	1979 % OF TOTAL EMPLD	1979 MEDIAN ANNUAL SALARY	1981 NUMBER	1981 PERCENT	1981 % OF TOTAL EMPLD	1981 MEDIAN ANNUAL SALARY
TOTAL	53,403	100.0	24.2	23,300	64,627	100.0	25.2	26,000	71,475	100.0	25.1	29,900	82,824	100.0	26.4	33,800	99,020	100.0	28.8	40,300
FIELD																				
PHYSICAL SCIENTISTS	19,659	36.8	40.6	22,700	22,117	34.2	40.5	25,500	22,980	32.2	40.0	29,500	25,063	30.2	41.6	33,100	27,401	27.7	43.4	39,900
CHEMISTS	15,746	29.5	51.3	22,600	18,085	28.0	50.5	25,900	18,664	26.1	50.0	30,030	20,524	24.8	51.9	32,900	22,250	22.5	53.0	39,900
PHYSICISTS/ASTRONOMERS	3,913	7.3	22.0	23,600	4,032	6.2	21.4	25,500	4,316	6.0	21.4	29,700	4,479	5.4	21.7	34,000	5,151	5.2	24.3	39,800
MATHEMATICAL SCIENTISTS	873	1.6	7.2	24,100	1,053	1.6	7.7	25,600	1,282	1.8	8.8	27,400	1,445	1.7	9.4	30,800	1,621	1.6	10.4	37,100
MATHEMATICIANS	672	1.3	6.3	24,000	836	1.3	7.0	26,100	956	1.4	7.7	27,300	1,175	1.4	9.1	30,900	1,159	1.2	8.9	36,800
STATISTICIANS	201	.4	13.8	25,000	217	.3	12.5	24,500	286	.4	16.7	27,600	270	.3	11.4	**	462	.5	18.1	37,700
COMPUTER SPECIALISTS	998	1.9	37.1	22,200	1,414	2.2	40.4	24,100	3,058	4.3	53.0	26,700	3,671	4.4	54.5	29,600	5,212	5.3	57.6	36,200
ENVIRONMENTAL SCIENTISTS	2,204	4.1	21.3	22,600	2,918	4.5	24.1	26,200	3,103	4.3	23.8	28,600	4,246	5.1	25.1	34,000	4,788	4.8	29.9	40,800
EARTH SCIENTISTS	2,085	3.9	24.4	22,500	2,671	4.1	28.0	26,500	2,700	3.8	27.6	28,600	3,777	4.6	33.9	34,100	4,213	4.3	34.8	43,000
OCEANOGRAPHERS	94	.2	8.3	**	76	.1	6.0	**	135	.2	8.6	**	222	.3	13.4	**	184	.2	10.3	**
ATMOSPHERIC SCIENTISTS	25	*	3.9	**	171	.3	13.0	22,600	268	.4	15.8	29,200	247	.3	13.7	**	391	.4	18.4	38,100
ENGINEERS	17,766	33.3	49.7	23,200	22,118	34.2	52.2	26,100	22,870	32.0	50.8	30,000	26,436	31.9	52.6	35,000	31,659	32.0	55.6	41,300
LIFE SCIENTISTS	7,246	13.6	12.5	23,300	8,834	13.7	13.6	25,500	10,075	14.1	14.0	28,700	11,464	13.8	14.3	33,300	13,473	13.6	15.5	39,700
BIOLOGICAL SCIENTISTS	3,326	6.2	9.0	22,700	3,498	5.4	9.0	24,800	4,011	5.6	9.5	27,400	4,344	5.2	9.5	32,700	5,330	5.4	10.7	36,500
AGRICULTURAL SCIENTISTS	1,796	3.4	17.0	21,800	2,517	3.9	19.5	23,200	2,858	4.0	20.0	26,800	3,384	4.1	22.5	30,500	3,450	3.5	21.7	36,200
MEDICAL SCIENTISTS	2,124	4.0	20.0	26,200	2,819	4.4	21.4	29,700	3,206	4.5	20.7	33,200	3,736	4.5	19.4	37,600	4,693	4.7	22.2	45,700
PSYCHOLOGISTS	3,081	5.8	12.4	30,000	4,124	6.4	13.7	30,500	5,525	7.7	16.4	33,300	7,076	8.5	18.6	38,100	10,145	10.2	23.6	40,300
SOCIAL SCIENTISTS	1,576	3.0	5.6	27,500	2,049	3.2	5.9	28,300	2,582	3.6	6.0	30,200	3,481	4.2	7.2	32,400	4,721	4.8	8.9	39,000
ECONOMISTS	944	1.8	11.4	29,600	1,234	1.9	12.5	30,800	1,385	1.9	12.8	34,100	1,568	1.9	13.4	37,200	2,161	2.2	16.1	42,600
SOCIOLOGISTS/ANTHRO.	125	.2	1.9	**	94	.1	1.2	**	193	.3	2.0	**	287	.3	2.8	**	487	.5	4.6	24,900
OTHER SOCIAL SCIENTISTS	507	.9	3.8	25,200	721	1.1	4.3	23,300	1,004	1.4	4.5	26,800	1,626	2.0	6.1	30,400	2,073	2.1	7.3	35,500
SEX																				
MEN	52,040	97.4	25.6	23,300	62,486	96.7	26.7	26,100	68,516	95.9	26.7	30,000	78,246	94.5	27.9	34,100	91,800	92.7	30.3	40,500
WOMEN	1,363	2.6	8.0	20,200	2,141	3.3	9.7	22,200	2,959	4.1	10.8	24,400	4,578	5.5	13.7	27,600	7,220	7.3	17.6	31,600
RACE																				
WHITE	48,847	91.5	24.3	23,500	57,514	89.0	25.0	26,400	62,603	87.6	24.7	30,200	70,637	85.3	25.6	34,800	84,682	85.5	27.8	40,600
BLACK	308	.6	14.7	23,100	364	.6	14.5	24,500	439	.6	15.8	27,600	415	.5	12.1	27,900	613	.6	14.2	40,000
AMERICAN INDIAN	65	.1	16.7	**	85	.1	17.2	**	149	.2	23.9	26,500	184	.2	19.5	28,000	586	.6	26.7	45,300
ASIAN	2,743	5.1	30.0	20,900	4,400	6.8	34.6	22,500	5,812	8.1	37.9	24,600	8,780	10.6	41.7	30,300	11,763	11.9	63.8	36,500
NO REPORT	1,440	2.7	18.2	23,300	2,264	3.5	21.4	25,800	2,472	3.5	20.6	30,200	2,600	3.1	22.7	34,600	1,376	1.4	24.0	41,500
AGE																				
UNDER 30	1,999	3.7	20.7	17,800	2,054	3.2	21.6	19,800	1,760	2.5	20.8	21,300	1,789	2.2	23.5	25,000	2,331	2.4	27.9	31,600
30-34	12,262	23.0	24.7	20,100	14,848	23.0	26.9	21,900	13,648	19.1	25.5	24,100	14,309	17.3	27.2	26,900	15,575	15.7	30.4	33,300
35-39	10,432	19.5	24.8	22,500	13,755	21.3	25.7	25,300	18,182	25.4	27.2	28,200	21,581	26.1	28.4	31,900	24,188	24.4	31.5	38,300
40-44	8,513	15.9	24.1	24,900	9,993	15.5	24.9	28,100	11,388	15.9	25.2	31,100	14,856	17.9	27.4	35,500	20,055	20.3	29.7	41,500
45-49	7,102	13.3	23.7	26,800	7,987	12.4	23.7	30,700	9,010	12.6	23.9	34,300	10,103	12.2	25.3	37,900	12,670	12.8	28.8	45,300
50-54	6,283	11.8	26.1	27,900	7,369	11.4	25.7	31,000	7,316	10.2	23.6	36,100	7,681	9.3	23.2	40,900	9,148	9.2	25.1	49,100
55-59	3,870	7.2	24.8	27,600	4,590	7.1	24.9	31,700	5,570	7.8	24.7	36,000	6,631	8.0	25.0	40,900	7,479	7.6	25.0	50,100
60-64	1,957	3.7	21.8	27,900	2,713	4.2	24.1	31,300	3,128	4.4	24.1	36,500	3,686	4.5	23.5	40,900	4,734	4.8	25.2	48,800
65 & OVER	932	1.7	19.1	25,800	1,212	1.9	22.1	30,500	1,394	2.0	23.3	36,500	2,046	2.5	25.7	40,800	2,835	2.9	27.6	50,300
NO REPORT	53	.1	35.1	**	102	.2	41.6	**	79	.1	25.8	**	142	.2	27.3	**	5	*	15.2	**
TYPE OF EMPLOYMENT																				
SCIENCE/ENGINEERING	49,397	92.5	24.0	23,100	60,093	93.0	25.0	26,000	65,014	91.0	24.9	29,700	75,115	90.7	26.2	33,500	88,705	89.6	28.2	40,200
OTHER/UNKNOWN FIELD	4,006	7.5	28.3	25,700	4,534	7.0	28.4	27,300	6,461	9.0	27.8	32,500	7,709	9.3	28.9	36,800	10,315	10.4	34.9	42,800
PRIMARY WORK ACTIVITY																				
RESEARCH AND DEVELOPMENT	23,758	44.5	33.2	21,300	28,739	44.5	34.9	24,000	31,339	43.8	33.5	27,100	30,796	37.2	30.9	30,900	43,636	44.1	36.3	37,000
BASIC RESEARCH	3,525	6.6	10.3	21,600	4,252	6.6	11.1	24,400	4,631	6.5	10.6	27,400	4,713	5.7	9.8	29,600	6,347	6.4	11.5	36,900
APPLIED RESEARCH	13,212	24.7	46.0	21,300	15,115	23.4	46.0	24,100	16,537	23.1	45.4	27,400	14,320	17.3	38.9	31,200	21,849	22.1	47.0	37,400
DEVELOPMENT	7,021	13.1	82.6	21,100	9,372	14.5	82.7	23,800	10,171	14.2	75.3	26,700	11,763	14.2	78.4	31,100	15,440	15.6	84.1	36,700
MANAGEMENT/ADMINISTRATION †	19,840	37.2	43.0	27,000	22,678	35.1	43.8	30,600	23,934	33.5	39.6	34,600	27,877	33.7	38.6	37,300	24,627	24.9	40.8	47,800
OF R&D	14,242	26.7	54.3	26,300	15,718	24.3	54.8	30,400	15,917	22.3	51.8	34,300	23,771	28.7	55.2	36,800	18,543	18.7	56.8	46,600
OF OTHER	5,598	10.5	28.1	29,400	6,960	10.8	30.1	32,000	8,017	11.2	27.0	35,300	4,106	5.0	14.1	41,300	6,084	6.1	22.0	51,000
TEACHING	191	.4	.2	**	182	.3	.2	**	242	.3	.3	25,500	186	.2	.2	**	495	.5	.5	40,000
CONSULTING	2,781	5.2	68.6	25,100	4,052	6.3	73.5	25,800	4,133	5.8	67.3	30,000	6,327	7.6	70.3	32,600	9,550	9.6	79.4	40,400
SALES/PROF. SERVICES	3,001	5.6	37.2	25,400	4,401	6.8	37.7	27,400	6,247	8.7	41.1	30,700	9,753	11.8	46.3	35,900	11,969	12.1	46.5	40,500
OTHER	2,988	5.6	42.9	21,700	3,220	5.0	43.0	24,100	4,389	6.1	34.3	26,300	6,807	8.2	43.4	32,700	7,565	7.6	46.0	38,000
NO REPORT	844	1.6	22.9	23,200	1,355	2.1	22.3	26,300	1,191	1.7	20.4	26,000	1,078	1.3	25.9	30,800	1,178	1.2	29.7	36,500

*LESS THAN .05 PERCENT

**NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.

†THE CLASSIFICATION OF "MANAGMENT/ADMINISTRATION" ACT.VITIES WAS CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITIES, P. 12 FOR EXPLANATION.

NOTE:PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARIES COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

SOURCE:NATIONAL SCIENCE FOUNDATION

TABLE 5. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED BY THE FEDERAL GOVERNMENT

CHARACTERISTICS	1973				1975				1977				1979				1981			
	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY
TOTAL	18,200	100.0	8.3	23,500	18,955	100.0	7.4	26,300	21,368	100.0	7.5	29,700	23,923	100.0	7.6	33,400	25,087	100.0	7.3	40,300
FIELD																				
PHYSICAL SCIENTISTS	4,104	22.5	8.5	23,400	3,745	19.7	6.9	26,000	3,945	18.5	6.9	29,700	4,551	19.2	7.6	33,200	4,343	17.3	6.9	40,100
CHEMISTS	1,645	9.0	5.4	23,700	1,684	8.9	4.7	26,300	1,814	8.5	4.9	29,100	2,110	8.8	5.3	32,900	2,131	8.5	5.1	39,100
PHYSICISTS/ASTRONOMERS	2,459	13.5	13.9	23,300	2,061	10.9	10.9	25,700	2,131	10.0	10.6	30,100	2,441	10.4	12.0	33,300	2,212	8.8	10.4	42,200
MATHEMATICAL SCIENTISTS	487	2.7	4.0	23,500	556	2.9	4.1	27,600	604	2.8	4.1	29,300	817	3.4	5.3	36,300	852	3.4	5.5	40,200
MATHEMATICIANS	355	2.0	3.3	22,800	372	2.0	3.1	26,000	449	2.1	3.5	29,400	575	2.4	4.4	38,500	553	2.2	4.2	40,800
STATISTICIANS	132	.7	9.0	25,000	184	1.0	10.6	30,100	155	.7	9.0	**	242	1.0	10.2	**	299	1.2	11.7	39,200
COMPUTER SPECIALISTS	123	.7	4.6	22,100	194	1.0	5.5	24,800	251	1.2	4.4	30,500	336	1.4	5.0	**	355	1.4	3.9	38,700
ENVIRONMENTAL SCIENTISTS	1,959	10.8	19.0	23,800	2,210	11.6	18.2	27,500	2,415	11.3	18.5	30,700	2,714	11.3	18.6	35,300	3,069	12.2	19.1	40,700
EARTH SCIENTISTS	1,539	8.5	18.0	24,100	1,557	8.2	16.3	27,700	1,634	7.6	16.7	30,600	1,827	7.6	16.4	36,000	2,060	8.2	17.0	40,900
OCEANOGRAPHERS	196	1.1	17.3	22,400	239	1.3	18.7	28,500	287	1.3	18.4	28,300	387	1.6	23.3	32,400	367	1.5	20.6	40,200
ATMOSPHERIC SCIENTISTS	224	1.2	35.1	23,400	414	2.2	31.4	27,200	494	2.3	25.1	31,400	500	2.1	27.7	35,400	642	2.6	30.2	41,200
ENGINEERS	2,730	15.0	7.6	23,400	3,029	15.9	7.1	26,700	3,519	16.5	7.8	30,000	3,571	14.9	7.1	35,200	3,805	15.2	6.7	42,600
LIFE SCIENTISTS	6,108	33.6	10.5	22,800	6,279	33.1	9.6	25,400	6,760	31.6	9.4	28,400	7,485	31.3	9.3	32,000	7,590	30.3	8.8	38,300
BIOLOGICAL SCIENTISTS	3,444	18.9	9.3	22,400	3,442	18.1	8.8	25,100	3,367	15.8	8.0	27,900	3,949	16.5	8.6	30,900	4,156	16.6	8.4	37,700
AGRICULTURAL SCIENTISTS	1,822	10.0	17.3	22,500	2,039	10.7	15.8	25,000	2,496	11.7	17.5	27,700	2,472	10.3	16.4	32,700	2,435	9.7	15.3	38,500
MEDICAL SCIENTISTS	842	4.6	7.9	26,000	798	4.2	6.1	29,000	897	4.2	5.8	32,400	1,064	4.4	5.5	35,300	999	4.0	4.7	40,700
PSYCHOLOGISTS	1,237	6.8	5.0	23,800	970	5.1	3.2	26,800	1,231	5.8	3.6	30,600	1,102	4.6	2.5	34,800	1,211	4.8	2.8	39,000
SOCIAL SCIENTISTS	1,452	8.0	5.2	28,000	2,012	10.6	5.8	29,200	2,643	12.4	6.2	31,400	3,307	13.8	6.8	34,600	3,862	15.4	7.3	44,600
ECONOMISTS	651	3.6	7.9	26,800	918	4.8	9.3	27,500	950	4.4	8.8	32,500	1,262	5.3	10.8	37,900	1,258	5.0	9.4	46,700
SOCIOLOGISTS/ANTHRO	64	.4	1.0	**	155	.8	2.0	**	132	.6	1.4	**	121	.5	1.2	**	301	1.2	2.7	**
OTHER SOCIAL SCIENTISTS	737	4.0	5.5	29,000	939	4.9	5.6	30,500	1,561	7.3	7.0	31,300	1,924	8.0	7.2	32,700	2,303	9.2	8.1	44,200
SEX																				
MEN	17,229	94.7	8.5	23,500	17,922	94.6	7.7	26,400	20,095	94.0	7.8	29,800	22,302	93.2	8.0	33,800	23,091	92.0	7.6	40,800
WOMEN	971	5.3	5.7	21,500	1,033	5.4	4.7	24,700	1,273	6.0	4.6	26,600	1,621	6.8	4.9	28,000	1,996	8.0	4.9	33,500
RACE																				
WHITE	16,976	93.3	8.5	23,500	17,356	91.6	7.6	26,200	19,434	90.9	7.7	29,700	21,796	91.1	7.5	33,400	22,956	91.5	7.5	40,400
BLACK	207	1.1	9.9	23,200	232	1.2	9.2	28,100	272	1.3	5.8	30,500	375	1.6	11.0	32,200	259	1.0	6.0	36,700
AMERICAN INDIAN	20	.1	5.1	**	26	.1	5.3	**	32	.1	5.1	**	61	.3	6.6	**	176	.7	8.0	**
ASIAN	478	2.6	5.2	22,700	636	3.3	5.0	25,300	801	3.7	5.2	26,400	981	4.1	4.7	30,000	1,334	5.2	4.9	37,700
NO REPORT	519	2.9	6.6	23,800	705	3.7	6.7	28,100	829	3.9	6.9	31,100	710	3.0	6.2	35,600	362	1.5	6.6	**
AGE																				
UNDER 30	639	3.5	6.6	17,300	545	2.9	5.8	19,200	308	1.4	3.6	20,700	204	.9	2.7	**	320	1.3	3.8	28,600
30-34	3,628	19.9	7.3	19,000	3,515	18.5	6.4	21,300	3,693	17.3	6.9	22,900	3,215	13.4	6.1	26,000	2,302	9.2	6.5	32,000
35-39	3,205	17.6	7.6	21,600	3,916	20.6	7.3	24,300	4,747	22.2	7.1	26,500	6,456	27.0	8.5	31,100	6,509	25.9	8.5	35,900
40-44	2,961	16.3	8.4	23,900	3,200	16.8	8.0	26,700	3,766	17.6	8.3	29,600	4,733	19.8	8.7	32,400	5,098	20.3	7.6	40,000
45-49	2,770	15.2	9.3	26,600	2,798	14.7	8.3	29,500	3,210	15.0	8.5	32,700	2,974	12.4	7.5	37,700	3,463	13.8	7.9	42,900
50-54	2,270	12.5	9.4	27,300	2,249	11.8	7.8	32,000	2,640	12.4	8.5	35,600	2,796	11.7	8.4	38,200	2,928	11.7	8.0	45,800
55-59	1,578	8.7	10.1	29,600	1,467	7.7	8.0	33,000	1,718	8.0	7.6	38,100	1,925	8.0	7.3	42,800	2,529	10.1	8.5	49,900
60-64	719	4.0	8.0	30,900	910	4.8	8.1	34,600	911	4.3	7.0	37,500	1,015	4.2	6.5	45,400	1,272	5.1	6.8	50,100
65 & OVER	430	2.4	8.8	31,200	375	2.0	6.8	34,300	363	1.7	6.1	39,000	532	2.2	6.7	42,900	666	2.7	6.5	30,100
NO REPORT	***	***	***	**	12	.1	4.9	**	12	.1	3.9	**	73	.3	14.0	**	0	*	*	**
TYPE OF EMPLOYMENT																				
SCIENCE/ENGINEERING	17,373	95.5	8.4	23,300	18,358	96.5	7.7	26,200	20,419	95.6	7.8	29,400	22,646	94.7	7.5	33,200	23,797	94.9	7.6	40,200
OTHER/UNKNOWN FIELD	827	4.5	5.8	29,000	557	3.1	3.7	32,700	949	4.4	4.1	35,700	1,277	5.3	4.8	39,400	1,290	5.1	4.4	48,300
PRIMARY WORK ACTIVITY																				
RESEARCH AND DEVELOPMENT	10,012	55.0	14.0	21,600	10,375	54.6	12.6	24,600	10,854	50.8	11.6	27,100	12,139	50.7	12.2	31,300	13,692	54.6	11.4	37,700
BASIC RESEARCH	4,737	26.0	13.8	22,100	4,671	24.6	12.2	24,800	4,721	22.1	10.8	27,700	5,353	22.4	11.2	31,800	6,082	24.2	11.0	38,700
APPLIED RESEARCH	4,804	26.4	16.7	21,400	5,045	26.6	15.3	24,400	5,220	24.4	14.3	26,900	5,735	24.0	15.6	30,800	6,837	27.3	14.7	37,200
DEVELOPMENT	471	2.6	5.5	20,000	655	3.5	5.8	22,700	913	4.3	6.8	26,000	1,051	4.4	7.0	32,600	773	3.1	4.2	36,300
MANAGEMENT/ADMINISTRATION†	6,191	34.0	13.4	28,800	6,132	32.3	11.8	32,200	7,664	35.9	12.7	34,500	8,355	34.9	11.6	38,200	7,759	30.9	12.9	48,600
OF R&D	4,498	24.7	17.2	28,900	4,718	24.8	16.5	31,900	5,409	25.3	17.6	34,700	6,672	27.9	15.5	38,100	5,849	23.3	17.9	49,500
OF OTHER	1,693	9.3	8.5	28,100	1,414	7.4	6.1	32,900	2,255	10.6	7.6	34,300	1,683	7.0	5.8	38,400	1,910	7.6	6.9	44,800
TEACHING	248	1.4	.3	25,700	142	.7	.2	**	150	.7	.2	**	185	.8	.2	**	106	.4	.1	**
CONSULTING	167	.9	4.1	25,200	255	1.3	4.6	[illegible]9,000	277	1.3	4.5	27,200	336	1.4	3.7	33,800	373	1.5	3.1	37,900
SALES/PROF. SERVICES	548	3.0	6.8	21,500	327	1.7	2.8	24,000	345	1.6	2.3	29,800	366	1.5	1.7	29,900	775	3.1	3.0	39,800
OTHER	821	4.5	11.8	22,300	1,227	6.5	16.4	23,200	1,854	8.7	14.5	25,900	2,153	9.0	13.7	32,800	2,281	9.1	13.9	38,700
NO REPORT	213	1.2	5.8	26,600	537	2.8	8.8	25,400	224	1.0	3.8	30,700	389	1.6	9.3	**	101	.4	2.5	**

**NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.
***NO CASES REPORTED
†THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES WAS CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITIES," P. 12 FOR EXPLANATION.
NOTE: DATA REFER TO FEDERAL GOVERNMENT CIVILIAN EMPLOYEES ONLY. PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARIES COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 6. SELECTED CHARACTERISTICS OF EMPLOYED WOMEN DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S.

	1973				1975				1977				1979				1981			
CHARACTERISTICS	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY
TOTAL	16,958	100.0	7.7	17,300	22,113	100.0	8.6	19,100	27,504	100.0	9.7	20,700	33,343	100.0	10.6	23,100	40,942	100.0	11.9	27,000
FIELD																				
PHYSICAL SCIENTISTS	1,897	11.2	3.9	17,400	2,521	11.4	4.6	19,100	2,908	10.6	5.1	21,200	3,123	9.4	5.2	24,400	3,770	9.2	6.0	29,400
CHEMISTS	1,461	8.6	4.8	17,200	2,046	9.3	5.7	19,100	2,354	8.6	6.3	20,900	2,546	7.6	6.4	24,200	3,160	7.7	7.5	29,100
PHYSICISTS/ASTRONOMERS	436	2.6	2.5	17,600	475	2.1	2.5	19,400	554	2.0	2.8	23,100	577	1.7	2.8	25,400	610	1.5	2.9	31,200
MATHEMATICAL SCIENTISTS	775	4.6	6.4	16,600	907	4.1	6.7	18,400	1,048	3.8	7.2	19,900	1,138	3.4	7.4	21,700	1,315	3.2	8.4	26,800
MATHEMATICIANS	701	4.1	6.6	16,300	822	3.7	6.9	18,200	934	3.4	7.3	19,900	977	2.9	7.6	21,800	1,039	2.5	8.0	26,700
STATISTICIANS	74	.4	5.1	18,900	85	.4	4.9	21,600	114	.4	6.7	19,800	161	.5	6.8	21,600	276	.7	10.8	27,000
COMPUTER SPECIALISTS	88	.5	3.3	17,300	147	.7	4.2	18,000	233	.8	4.0	20,800	366	1.1	5.4	22,800	701	1.7	7.7	28,700
ENVIRONMENTAL SCIENTISTS	262	1.5	2.5	16,700	325	1.5	2.7	19,000	439	1.6	3.4	19,700	607	1.8	4.2	23,500	863	2.1	5.4	29,200
EARTH SCIENTISTS	205	1.2	2.4	16,200	242	1.1	2.5	18,200	293	1.1	3.0	20,000	410	1.2	3.7	25,300	578	1.4	4.8	30,000
OCEANOGRAPHERS	37	.2	3.3	**	51	.2	4.0	**	75	.3	4.8	19,200	152	.5	9.1	21,500	203	.5	11.4	28,700
ATMOSPHERIC SCIENTISTS	20	.1	3.1	**	32	.1	2.4	**	71	.3	4.2	19,200	45	.1	2.5	**	82	.2	3.9	28,000
ENGINEERS	139	.8	.4	19,600	235	1.1	.6	21,400	283	1.0	.6	22,900	527	1.6	1.0	26,600	759	1.9	1.3	32,000
LIFE SCIENTISTS	6,120	36.1	10.5	16,900	7,534	34.1	11.6	19,000	8,983	32.7	12.5	21,000	11,142	33.4	13.5	23,000	13,244	32.3	15.3	27,100
BIOLOGICAL SCIENTISTS	4,896	28.9	13.3	16,800	5,797	26.2	14.8	18,500	6,684	24.3	15.9	20,500	7,882	23.6	17.2	22,200	9,032	22.1	18.2	26,300
AGRICULTURAL SCIENTISTS	131	.8	1.2	16,700	167	.8	1.3	20,000	264	1.0	1.8	20,200	320	1.0	2.1	21,600	436	1.1	2.7	26,200
MEDICAL SCIENTISTS	1,093	6.4	10.3	18,100	1,570	7.1	11.9	20,600	2,035	7.4	13.1	22,800	2,940	8.8	15.2	25,300	3,776	9.2	17.8	29,500
PSYCHOLOGISTS	4,782	28.2	19.2	18,000	6,349	28.7	21.1	19,600	7,645	27.8	22.7	20,600	9,216	27.6	24.3	23,200	11,860	29.0	27.5	26,200
SOCIAL SCIENTISTS	2,895	17.1	10.3	17,300	4,095	18.5	11.9	18,700	5,965	21.7	14.0	20,200	7,224	21.7	14.9	22,600	8,430	20.6	15.9	25,900
ECONOMISTS	476	2.8	5.7	19,300	614	2.8	6.2	21,200	790	2.9	7.3	23,600	977	2.9	8.3	26,900	1,131	2.8	8.4	31,400
SOCIOLOGISTS/ANTHRO.	1,227	7.2	18.8	16,600	1,675	7.6	21.1	18,400	2,286	8.3	24.1	19,700	2,558	7.7	25.0	22,100	2,934	7.2	26.7	25,100
OTHER SOCIAL SCIENTISTS	1,192	7.0	9.0	17,100	1,806	8.2	10.8	18,200	2,889	10.5	12.9	19,800	3,689	11.1	13.8	22,300	4,365	10.7	15.3	25,800
RACE																				
WHITE	15,379	90.7	7.7	17,400	19,597	88.6	8.5	18,900	24,409	88.7	9.6	20,600	29,225	87.6	10.6	23,000	36,317	88.7	11.9	26,800
BLACK	255	1.5	12.2	18,300	424	1.9	16.9	20,700	524	1.9	18.9	22,500	785	2.4	23.0	24,100	1,037	2.5	24.0	28,300
AMERICAN INDIAN	34	.2	8.7	**	58	.3	11.7	**	71	.3	11.4	**	117	.4	12.6	21,600	309	.8	14.1	30,000
ASIAN	641	3.8	7.0	16,500	1,055	4.8	8.3	18,800	1,319	4.8	8.6	20,500	2,028	6.1	9.6	23,100	2,811	6.9	10.5	28,000
NO REPORT	649	3.8	8.2	17,400	979	4.4	9.3	20,300	1,181	4.3	9.8	21,600	1,188	3.6	10.3	24,800	468	1.1	8.1	31,000
AGE																				
UNDER 30	1,026	6.1	10.6	14,500	1,534	6.9	16.1	15,900	1,642	6.0	15.4	17,400	1,464	4.4	19.6	18,700	1,798	4.4	21.5	24,100
30-34	3,546	20.9	7.1	14,900	4,970	22.5	9.0	16,800	6,620	24.1	12.4	18,400	8,450	25.3	16.0	20,600	9,313	22.7	18.2	24,100
35-39	2,767	16.3	6.6	16,600	4,082	18.5	7.6	18,300	5,640	20.5	8.5	20,000	7,440	22.3	9.8	22,400	10,233	25.0	13.3	25,700
40-44	2,445	14.4	6.9	17,900	2,810	12.7	7.0	20,000	3,479	12.6	7.7	21,700	4,740	14.2	8.7	24,600	6,455	15.8	9.6	28,400
45-49	2,488	14.7	8.3	18,700	2,917	13.2	8.7	21,600	3,291	12.0	8.7	23,100	3,345	10.0	8.4	25,500	4,092	10.0	9.3	29,100
50-54	1,845	10.9	7.7	19,500	2,407	10.9	8.4	22,400	2,887	10.5	5.3	24,700	3,147	9.4	5.5	26,700	3,467	8.5	9.5	30,700
55-59	1,381	8.1	8.9	20,200	1,463	6.6	7.9	21,700	1,872	6.8	8.3	24,200	2,307	6.9	8.7	28,700	2,836	6.9	9.5	33,000
60-64	847	5.0	9.4	20,500	1,166	5.3	10.4	22,700	1,241	4.5	9.6	25,000	1,392	4.2	9.0	29,200	1,601	3.9	8.5	33,400
65 & OVER	570	3.4	11.7	19,800	703	3.2	12.8	22,300	726	2.6	12.2	25,100	913	2.7	11.5	27,900	1,114	2.7	10.9	32,100
NO REPORT	43	.3	28.5	**	61	.3	24.9	**	106	.4	34.6	**	145	.4	27.9	**	33	.1	100.0	**
TYPE OF EMPLOYMENT																				
SCIENCE/ENGINEERING	15,551	91.7	7.5	17,300	20,468	92.6	8.5	19,000	24,906	90.6	9.5	20,700	29,865	89.6	10.4	23,100	36,638	89.5	11.7	27,000
OTHER/UNKNOWN FIELD	1,407	8.3	9.9	18,200	1,645	7.4	10.3	19,600	2,598	9.4	11.2	20,500	3,478	10.4	13.0	23,800	4,304	10.5	14.6	27,500
SECTOR OF EMPLOYMENT																				
BUSINESS/INDUSTRY	1,363	8.0	2.6	20,200	2,141	9.7	3.3	22,200	2,959	10.8	4.1	24,400	4,578	13.7	5.5	27,600	7,220	17.6	7.3	31,600
EDUCATIONAL INSTITUTIONS	12,160	71.7	9.4	16,800	15,536	70.3	10.4	18,500	18,775	68.3	11.5	20,000	21,894	65.7	12.6	22,300	25,789	63.0	13.8	25,700
4-YEAR COLLEGES/UNIV	11,128	65.6	8.9	16,700	14,236	64.4	9.9	18,400	17,146	62.3	11.0	20,000	20,073	60.2	12.0	22,200	23,695	57.9	13.2	25,600
2-YEAR COLLEGES	549	3.2	18.5	16,700	701	3.2	19.7	18,700	927	3.4	20.0	19,700	898	2.7	19.9	23,800	1,044	2.5	20.7	27,100
ELEMENTARY/SEC.SCHOOLS	483	2.8	31.3	19,700	599	2.7	31.3	20,800	702	2.6	34.8	21,000	923	2.8	37.4	24,300	1,050	2.6	38.0	26,400
HOSPITALS/CLINICS	967	5.7	21.3	16,600	1,745	7.9	23.4	19,400	1,958	7.1	22.8	21,000	1,928	5.8	19.5	22,800	2,213	5.4	22.4	26,700
NONPROFIT ORGANIZATIONS	783	4.6	9.8	17,500	917	4.1	11.0	19,500	1,445	5.3	14.2	21,100	1,857	5.6	14.8	23,200	2,118	5.2	16.8	28,500
FEDERAL GOVERNMENT	971	5.7	5.3	21,900	1,033	4.7	5.4	24,700	1,273	4.6	6.0	26,600	1,621	4.9	6.8	28,000	1,996	4.9	8.0	33,300
MILITARY/COMM. CORPS	19	.1	1.0	**	39	.2	1.8	**	47	.2	2.1	**	52	.2	2.3	**	97	.2	4.7	**
STATE GOVERNMENT	386	2.3	12.9	18,300	393	1.8	13.0	19,800	455	1.8	13.1	19,500	772	2.3	18.5	20,400	863	2.1	19.4	24,700
OTHER GOVERNMENT	188	1.1	15.0	16,700	235	1.1	12.5	20,100	345	1.3	22.3	21,700	397	1.2	20.4	24,200	487	1.2	23.5	25,600
OTHER	74	.4	22.4	**	15	.1	18.3	**	23	.1	3.9	**	51	.2	5.4	**	68	.2	6.9	**
NO REPORT	47	.3	16.4	**	59	.3	18.1	**	184	.7	13.6	**	193	.6	13.8	**	91	.2	14.8	**
PRIMARY WORK ACTIVITY																				
RESEARCH AND DEVELOPMENT	4,654	27.4	6.5	17,400	5,998	27.1	7.3	19,100	7,596	27.6	8.1	21,000	9,373	28.1	9.4	23,200	12,290	30.0	10.2	28,000
BASIC RESEARCH	3,500	20.6	10.2	16,800	4,450	20.1	11.7	18,400	5,434	19.8	12.5	20,600	6,404	19.2	13.4	22,200	7,991	19.5	14.5	26,400
APPLIED RESEARCH	1,004	5.9	3.5	18,500	1,323	6.0	4.0	20,400	1,757	6.4	4.8	22,200	2,427	7.3	6.6	25,000	3,515	8.6	7.6	29,800
DEVELOPMENT	150	.9	1.8	17,100	225	1.0	2.0	19,300	405	1.5	3.0	20,500	542	1.6	3.6	24,300	784	1.9	4.3	29,800
MANAGEMENT/ADMINISTRATION[†]	1,837	10.8	4.0	20,700	2,441	11.0	4.7	23,100	3,438	12.5	5.7	25,100	5,091	15.3	7.0	26,400	5,001	12.2	8.3	32,400
OF R&D	704	4.2	2.7	20,900	893	4.0	3.1	24,700	1,234	4.5	4.0	26,300	2,035	6.1	4.7	27,800	1,522	3.7	4.7	36,000
OF OTHER	1,133	6.7	5.7	20,600	1,548	7.0	6.7	22,400	2,204	8.0	7.4	24,400	3,056	9.2	10.5	25,400	3,479	8.5	12.6	30,700
TEACHING	7,504	44.3	9.4	16,500	9,480	42.9	10.4	18,200	10,356	37.8	11.5	19,500	11,415	34.2	12.4	21,800	13,919	34.0	13.3	25,300
CONSULTING	333	2.0	8.2	18,200	400	1.8	7.3	20,800	455	1.8	8.1	22,300	606	1.8	6.7	25,100	1,072	2.6	8.9	28,900
SALES/PROF. SERVICES	1,647	9.7	20.4	18,100	2,348	10.6	20.1	20,000	3,222	11.7	21.2	21,200	4,378	13.1	20.8	24,500	5,817	14.2	22.6	26,600
OTHER	641	3.8	9.2	17,600	822	3.7	11.0	18,400	1,652	6.0	12.9	20,500	1,788	5.4	11.4	22,900	2,253	5.5	13.7	26,300
NO REPORT	342	2.0	9.3	17,200	624	2.8	10.3	20,600	705	2.6	12.1	20,300	692	2.1	16.6	23,200	590	1.4	14.9	26,600
FEDERAL SUPPORT STATUS																				
RECEIVING SUPPORT	6,782	40.0	6.8	18,000	8,645	39.1	7.9	19,900	10,443	38.0	8.7	21,800	12,511	37.5	9.5	23,700	14,363	35.0	11.3	27,700
NO SUPPORT	8,858	52.2	8.0	17,000	11,921	53.9	8.7	18,700	15,040	54.7	9.8	20,300	18,130	54.4	10.6	22,900	20,189	49.3	12.6	26,300
STATUS UNKNOWN	1,058	6.2	15.5	15,800	1,178	5.3	17.7	18,400	1,477	5.4	15.7	15,700	1,819	5.5	19.8	21,100	1,559	3.8	24.5	25,000
NO REPORT	260	1.5	8.4	17,600	365	1.7	16.0	19,500	544	2.0	12.2	19,200	883	2.6	12.1	23,000	4,851	11.8	9.8	29,200

**NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.

†THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES WAS CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITIES," P. 12 FOR EXPLANATION.

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARIES COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

SOURCE: NATIONAL SCIENCE FOUNDATION

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section a

technical notes

Surveys of doctoral scientists and engineers are conducted on the basis of a sample of individuals drawn from a roster of doctorate recipients. The roster was compiled from a number of sources, including the following: National Academy of Sciences/National Research Council's (NAS/NRC) Doctorate Records File, an accumulated record of data of doctorate recipients from U.S. institutions maintained by NAS/NRC; National Science Foundation's (NSF) National Register of Scientific and Technical Personnel, which from 1954 through 1970 collected information on highly qualified personnel in science fields; *American Men and Women of Science;* and several other sources including university and college catalogs of doctorate-granting institutions; Federal laboratories; and selected industrial organizations. The 1981 population consists of individuals who earned doctorates within the 42-year period 1938-80. Included in this population are individuals who earned a doctorate at U.S. institutions in the natural or social sciences, mathematics, and engineering, as well as individuals who received research doctorates in non-S/E fields but were known to be employed as scientists or engineers. In addition, the population included individuals who had earned their doctorates at foreign institutions and were known to be working in the United States as scientists or engineers.

The 1981 Survey of Doctorate Recipients was the fifth in a biennial series. The first, conducted in 1973, included individuals who had received doctorates between 1930 and 1972. Subsequent surveys continued to account for a 42-year period by adding the two most recent graduating cohorts and eliminating the two oldest. The resulting population is slightly larger than that reported by NAS/NRC based on this survey[1] because the NSF estimates include non-S/E doctorate-holders employed as scientists or engineers and because of other differences in methods of classification. The numerical differences and a comparison of NSF and NAS/NRC field classifications are outlined in table A-1.

survey procedures

A sample of approximately 50,000 scientists and engineers was selected for the 1981 survey.[2] In drawing this sample, individuals in the file were stratified according to (1) source and type of degree (U.S. S/E doctorate-holders, non-S/E doctorate-holders, and foreign doctorate-holders); (2) sex; (3) field of doctorate; (4) year of doctorate; (5) racial/ethnic identification; and (6) citizenship.

Source and type of degree—Since the roster is compiled from several sources, it was necessary, for sampling purposes, to treat as separate segments those individuals who received their degrees from U.S. institutions, those who held doctorates from foreign institutions, and those who held non-S/E doctorates.

Sex—The number of women S/E doctorate-holders is significantly smaller than that of men. This characteristic, therefore, was used to define a stratum to assure that women were adequately represented in the sample selected.

Field of doctorate—This is the major subject of an individual's doctorate.

Year of the doctorate—Various classes of graduates were grouped to form cohorts according to year of degree. Since the earlier classes had fewer graduates, a larger number of years was grouped. As the size of classes increased in later years, the number of classes included in a cohort was decreased.

Racial/ethnic identification—This stratum was selected to assure that racial/ethnic minorities would be adequately sampled. Racial/ethnic data were available beginning with the 1973 cohort.

Citizenship—A nonresponse bias study[3] of the Survey of Doctorate Recipients revealed a higher percentage of nonrespondents among foreign citizens and residents than U.S. citizens. Accordingly, citizenship was included as a stratification variable to adjust for this bias.

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[1] National Academy of Sciences, *Science, Engineering, and Humanities Doctorates in the United States: 1981 Profile* (Washington, D.C., 1982).

[2] Beginning in 1977 the Survey of Doctorate Recipients was expanded to include humanists. This report, however, is limited to that aspect of the survey dealing with scientists and engineers.

[3] Andrew W. Spisak and Betty D. Maxfield, *The Effects of Nonresponse Bias on the 1975 Survey of Doctoral Scientists and Engineers* (Washington, D.C.: National Academy of Sciences, 1979) and National Academy of Sciences, *Science, Engineering, and Humanities Doctorates in the United States, op. cit.*

Table A-1. Doctoral scientists and engineers in the U.S. by NSF and NAS/NRC field classification: 1981 Survey of Doctorate Recipients

Field	NSF		NAS/NRC			
			Field of doctorate		Field of employment	
	Number	Percent	Number	Percent	Number	Percent
Total scientists/engineers	363,866	100.0	358,600	100.0	338,300	100.0
Physical scientists	67,693	18.6	(1)	(1)	(1)	(1)
Chemists	45,376	12.5	48,000	13.4	35,300	10.4
Physicists/astronomers	22,317	6.1	29,200	8.1	19,000	5.6
Mathematical scientists	16,470	4.5	19,000	5.3	13,900	4.1
Mathematicians	13,819	3.8	(1)	(1)	(1)	(1)
Statisticians	2,651	.7	(1)	(1)	(1)	(1)
Computer specialists	9,066	2.5	2,200	.5	8,300	2.5
Environmental scientists	16,589	4.6	12,400	3.5	15,200	4.5
Earth scientists	12,605	3.5	(1)	(1)	(1)	(1)
Oceanographers	1,818	.5	(1)	(1)	(1)	(1)
Atmospheric scientists	2,166	.6	(1)	(1)	(1)	(1)
Engineers	58,311	16.0	52,900	14.8	52,900	15.6
Aeronautical/astronautical	2,536	.7	(1)	(1)	(1)	(1)
Chemical	7,612	2.1	(1)	(1)	(1)	(1)
Civil	6,032	1.7	(1)	(1)	(1)	(1)
Electrical/electronics	10,834	3.0	(1)	(1)	(1)	(1)
Materials science	6,238	1.7	(1)	(1)	(1)	(1)
Mechanical	5,577	1.5	(1)	(1)	(1)	(1)
Nuclear	2,061	.6	(1)	(1)	(1)	(1)
Systems design	5,366	1.5	(1)	(1)	(1)	(1)
Other	12,055	3.3	(1)	(1)	(1)	(1)
Life scientists	93,848	25.8	(1)	(1)	(1)	(1)
Biological scientists	54,442	15.0	64,800	18.1	49,600	14.7
Agricultural scientists	17,270	4.7	16,500	4.6	14,700	4.3
Medical scientists	22,136	6.1	11,100	3.1	20,400	6.0
Psychologists	45,416	12.5	47,400	13.2	38,600	11.4
Social scientists	56,473	15.5	55,100	15.4	40,900	12.1
Economists	14,294	3.9	(1)	(1)	(1)	(1)
Sociologists/anthropologists	11,909	3.3	(1)	(1)	(1)	(1)
Other social scientists	30,270	8.3	(1)	(1)	(1)	(1)
Nonscience/nonengineering	(1)	(1)	(1)	(1)	17,800	5.3
No report	(1)	(1)	(1)	(1)	11,700	3.5

[1] Not included in field classification.

NOTE: Percents may not add to 100 because of rounding.

SOURCES: National Science Foundation and National Academy of Sciences/National Research Council

sampling and mailing

To assure adequate representation of small groups within the population, variable sampling ratios were used. Within small cells this necessitated the inclusion of all available cases, whereas larger cells did not need to be so heavily sampled to yield reliable statistics. Accordingly, as cell size increased, an increasing number, but decreasing percent, of cases was included in the sample.

Initial mailing of the questionnaire took place in March 1981; a followup mailing to those who had not yet responded was conducted in May. In addition, special followup mailings were conducted in August/September 1981 in which nonrespondents were asked to update prior survey responses to key questionnaire items. The abbreviated questionnaire included items on field, employment status, type of employer, primary work activity, academic rank, tenure status, and salary.

response rates

From the survey sample drawn, approximately 1,800 individuals were known to be deceased or otherwise outside the scope of the survey; this resulted in an active sample of 48,205 individuals. The number of individuals assumed to have been contacted was 43,162. A total of 30,548 survey responses were received. The survey yielded an overall response rate of 63.4 percent of the active sample and 70.8 percent of those contacted. Sample sizes and response rates for particular characteristics of the 1981 survey are presented in table A-2.

Since the various cells in the sample were not equally represented, it was necessary to assign differential weights to generate estimates of the total population; i.e., each response was weighted so that the statistics represent, as nearly as possible, the results that would have been obtained if the entire population had been surveyed. The responses received from the survey sample were assigned a response weight that is the product of the nonresponse ratio and the sample weight.[4]

Table A-2. Stratification, sample, and survey responses of doctoral scientists and engineers: 1981 Survey of Doctorate Recipients

Stratification category	Sampling frame[1]	Active sample[2]	Sample contacted[3]	Survey responses	Response rates[4] A	Response rates[4] B
Total	389,657	48,205	43,162	30,548	63.4	70.8
Segment/Citizenships						
U.S. scientist/engineer, unknown citizenship	65,722	8,151	7,603	5,650	69.3	74.3
U.S. scientist/engineer, U.S. citizenship	263,009	31,783	28,789	21,444	67.5	74.5
U.S. scientist/engineer, foreign citizenship	41,152	6,117	5,075	2,309	37.7	45.5
U.S. non-scientist/engineer, unknown citizenship	2,368	187	171	132	70.6	77.2
U.S. non-scientist/engineer, U.S. citizenship	5,679	280	263	203	72.5	77.2
U.S. non-scientist/engineer, foreign citizenship	139	45	41	26	57.8	63.4
Foreign institution Ph. D.	11,588	1,642	1,220	784	47.7	64.3
Field of Ph. D./Employment						
Mathematics	19,474	3,593	3,236	2,226	62.0	68.8
Computer sciences	2,056	776	604	414	53.4	68.5
Physics/astronomy	32,019	3,588	3,241	2,240	62.4	69.1
Chemistry	52,165	5,446	4,785	3,380	62.1	70.6
Environmental sciences	12,106	2,630	2,334	1,722	65.5	73.8
Engineering	56,082	3,692	3,210	2,086	56.5	65.0
Biosciences	97,962	16,821	15,284	11,129	66.2	72.8
Psychology	47,653	5,687	5,050	3,615	63.6	71.6
Social sciences	61,524	5,108	4,653	3,235	63.3	69.5
Other/nonscience/unknown	8,616	864	765	501	58.0	65.5
Year of Ph. D.						
Calendar year 1938-Fiscal year 1957	71,891	8,719	8,101	6,003	68.8	74.1
Fiscal years 1958-65	62,598	6,494	6,078	4,420	68.1	72.7
Fiscal years 1966-69	57,597	5,971	5,484	3,939	66.0	71.8
Fiscal years 1970-74	91,711	11,520	10,154	7,054	61.2	69.5
Fiscal years 1975-76	35,691	6,276	5,313	3,505	55.8	66.0
Fiscal years 1977-78	34,372	4,313	3,943	2,688	62.3	68.2
Fiscal years 1979-80	34,405	4,340	3,697	2,702	62.3	73.1
Merged cohorts	717	387	280	182	47.0	65.0
Unknown	675	185	112	55	29.7	49.1
Sex						
Men	342,073	32,443	29,204	20,562	63.4	70.4
Women	47,584	15,762	13,958	9,986	63.4	71.5
Race/Ethnic Identification						
Pre-1973[5]	248,708	27,410	25,248	18,385	67.1	72.8
White/unknown	123,102	14,901	12,944	9,331	62.6	72.1
Minorities	17,847	5,894	4,970	2,832	48.0	57.0

[1] Includes those deceased and those residing in foreign countries.

[2] Excludes those deceased or determined to be out of scope prior to the 1981 survey.

[3] Consists of individuals for whom valid addresses were assumed to have been obtained.

[4] Response rate A is the number of survey responses divided by the number in the active sample; response rate B is the number of responses divided by the number assumed to have been contacted.

[5] Created for certain small subgroups.

[6] Racial/ethnic data not available for stratification purposes prior to fiscal year 1973.

SOURCE: National Academy of Sciences/National Research Council

definitions

A copy of the questionnaire and accompanying material are included in section C. The following definitions are provided to permit effective use of the data presented in the report.

Field of science or engineering—Derived from responses to question 4 which requested the name and code number of the specialty most closely related to the respondent's principal employment selected from the Degree and Employment Specialties List included with the questionnaire. The grouping of specialties to form fields was accomplished in accordance with the classification presented in table A-3. Individuals failing to respond to question 4 as well as those who reported non-S/E employment were assigned the specialty of their doctoral degree listed in item 20.

As stated earlier, this field definition, which pertains to all of the statistical tables presented in this report, differs from the field definition used by NAS/NRC in reporting the results of this survey.[5] Care should be exercised, therefore, in comparing data from these two sources.

Type of employer—Derived from question 7. The category "educational institutions" includes junior colleges, 2-year colleges, technical institutes, medical schools, 4-year colleges or universities, and elementary or secondary school systems. Private foundations are included in the category "nonprofit organizations."

Geographic location—Derived from responses to question 6 on the location of employment. Individuals not reporting place of employment or not employed were classified by their mailing address.

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[4] The nonresponse ratio is the number of survey sample cases in the stratum divided by the number of responses in the stratum. The sample weights (Ws) and response weights (Wr) for each stratum were computed as follows:

$Ws_h = \frac{N_h}{n_h}$, where N_h and n_h are the respective population and sample sizes of the stratum (h).

$Wr_h = \frac{N_h}{n_h} \quad \frac{\hat{n}_h}{r_h}$ where $\hat{n}_h$ is the number of survey sample cases in the stratum and r_h is the number of survey responses that stratum.

[5] National Academy of Sciences, *Science, Engineering, and Humanities Doctorates, op. cit.*

University or 4-year college teachers—Defined as those individuals who reported "4-year college" or "university, other than medical school," as their principal employer under question 7 and also reported "teaching" as their primary or secondary work activity under question 8.

Primary work activity—Derived from responses to question 8. The term "development" encompasses design as well as the development of equipment, products, systems, or data. "Sales/professional services" includes sales, marketing, purchasing, estimating, and professional services to individuals, but excludes consulting which is treated as a separate work activity. The work activities listed under question 8 as "writing, editing, production, curatorial work, cultural resources, archival work, performing arts, quality control, inspection, and testing," have been aggregated with "other" to form a single category.

Prior to 1979, options under the category "management/administration" included (1) research and development, (2) other than research and development, and (3) both. In 1979, these options were changed to (1) research and development, (2) educational programs, and (3) other. In the presentation of the estimates in this report, including the time-series tables, the "management of research and development" category has been retained, whereas the latter two categories have been aggregated to form a single category "other than research and development." The discontinuation of the "both" category may have resulted in a shift in the number of individuals who report themselves as managers of research and development.

Salaries—Derived from responses to question 9 which requested information regarding annual salary before deductions for income tax, social security, retirement, etc., but excluding bonuses, overtime, summer teaching, or other payment for professional work. Salaries reported are median annual salaries, rounded to the nearest $100 and computed for full-time employed civilian scientists and engineers only. Differences between calendar-year (11 to 12 months) and academic-year (9 to 10 months) salaries for scientists and engineers employed in educational institutions have been accommodated by multiplying academic-year salaries by eleven-ninths to adjust to a calendar-year scale.[6]

Topics of national interest—Derived from question 16. Responses to the category "cultural life" have been combined with "other" to form a single category.

Race—Derived from responses to question 25a. The 1981 estimate of American Indians should be interpreted with caution. At least one-half of the individuals who reported themselves as American Indians in 1981 did not report themselves as such in 1979.

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[6] Except for table B-20 where salary base period is included as a variable.

Table A-3. Science/engineering (S/E) field classification of specialties: 1981 Survey of Doctorate Recipients

Field	Specialty code
All S/E fields	000 to 799
Physical scientists	101 to 299
Chemists	200 to 299
Physicists and astronomers	101 to 199
Mathematical scientists	000 to 060, 082 to 099
Mathematicians	000 to 052, 060, 082 to 099
Statisticians	055
Computer specialists	071 to 079
Environmental scientists	301 to 399
Earth scientists	301 to 360, 388 to 395, 398, 399
Oceanographers	370,397
Atmospheric scientists	381 to 383
Engineers	400 to 499
Aeronautical/astronautical	400
Chemical	430
Civil	420,480
Electrical/electronics	437,440,445
Materials science	435,475,497
Mechanical	470
Nuclear	455
Systems design	476 to 478
Other	410,415,435, 450,460,465, 479,486,498,499
Life scientists	500 to 579
Biological scientists	540 to 579
Agricultural scientists	500 to 519
Medical scientists	520 to 539
Psychologists	600 to 699
Social scientists	700 to 799
Economists	720,725
Sociologists/anthropologists	700, 710
Other social scientists	703, 708, 709, 727 to 799
Non-S/E fields	801 to 899, 938

sampling errors

The survey data presented in this report are subject to error including those resulting from sampling. Although the data are based on a survey conducted in terms of a stratified sample, sampling errors presented below have been calculated assuming simple random sampling techniques. Comparisons between sampling errors computed on this basis and those that take stratification into account are presented in a recent NAS/NRC report[7] based on the 1981 survey. In that analysis it was determined that for most variables, the differences between the two errors are small; thus, a useful approximation of the sampling error appropriate to the variable designated categories appearing in this report is provided by the following formula:

$$s = \sqrt{\frac{N-n}{N-1}} \cdot \sqrt{\frac{p(1-p)}{n}}$$

where N = population estimate
n = sample size
p = proportion possessing attribute

Since the finite population correction factor $[(N-n)/(N-1)]^{1/2}$ is expected to have a negligible effect on most statistics presented in this document, it has been omitted in the calculation of sampling errors. If y is defined as the number of individuals being estimated, the standard error can be expressed as:

$$s = (y(N-y)/n)^{1/2}$$

Sample size (n) can be estimated by multiplying the population estimate (N) by the weighting fraction; i.e., the sampling fraction corrected for nonresponse. Table A-4 presents the mean weighting fractions for selected groups of employed Ph. D. scientists and engineers.

The tables on pages 14-15 present the estimated standard errors associated with a range of values for some selected populations based upon average weighting fractions across all fields. For example, table B-23 indicates that out of a total of about 40,900 employed women Ph. D. scientists and engineers, about 5,000 were engaged primarily in management/administrative activities. The table of standard errors for employed women presented on page 15 shows that an estimate of 5,000 has a standard error of about 135. This value, when added to and subtracted from 5,000, yields a confidence interval within which about 68 percent of all sample estimates, surveyed under the same conditions, will fail. To increase the level of confidence, the standard error can be multiplied by an appropriate coefficient, e.g., ±1.65 standard errors will yield about a 90-percent confidence interval, ±2 standard errors about a 95-percent confidence interval.

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[7] National Academy of Sciences, *Science, Engineering, and Humanities Doctorates, op. cit.*

Similar tables of standard errors for the total population and the major employment sectors are presented on pages 14-15.

In addition, the data in table A-4 can be used to estimate the standard errors of estimates within other employed populations by field. For example, table B-6 shows that of the nearly 44,300 employed white biological scientists, about 2,000 were employed by nonprofit organizations. Table A-4 shows that the mean weighting fraction for white biological scientists is .091. Multiplying this value by the population (44,300) yields an estimated sample size (n) of 4,031. Substituting these values in the formula listed above yields a standard error of 145; i.e.,

$$s = (2{,}000\ (44{,}300-2{,}000)/4{,}031)^{1/2} = 145$$

Multiplication of this value by the appropriate coefficient can be done to yield the desired confidence interval.

The reader is cautioned that the sampling errors computed on the basis of the procedures described above yield approximations and must therefore be considered estimates rather than precise measures.

Table A-4. Mean weighting fractions for selected groups of employed doctoral scientists and engineers: 1981 Survey of Doctorate Recipients

Field	Total	Sex		Race		
		Men	Women	White	Black	Asian
Total, scientists/engineers	.080	.062	.213	.078	.197	.079
Physical scientists	.072	.052	.395	.070	.202	.081
Chemists	.072	.049	.362	.069	.248	.087
Physicists/astronomers	.071	.056	.567	.071	.129	.146
Mathematical scientists	.110	.077	.476	.109	.208	.112
Mathematicians	.113	.079	.504	.112	.213	.110
Statisticians	.097	.064	.370	.095	.174	.116
Computer specialists	.098	.075	.375	.097	.300	.102
Environmental scientists	.113	.096	.399	.110	.293	.141
Earth scientists	.113	.098	.422	.112	.281	.126
Oceanographers	.125	.099	.320	.121	.286	.167
Atmospheric scientists	.099	.086	.427	.093	.500	.188
Engineers	.044	.039	.445	.044	.148	.040
Aeronautical/astronautical	.042	.036	.447	.040	.200	.054
Chemical	.039	.035	.500	.041	.081	.030
Civil	.041	.037	.316	.040	.208	.043
Electrical/electronics	.044	.039	.439	.043	.256	.041
Materials science	.046	.039	.470	.046	.400	.039
Mechanical	.039	.035	.500	.039	.300	.034
Nuclear	.044	.039	.611	.044	.333	.043
Systems design	.055	.045	.463	.052	.333	.063
Other	.046	.041	.461	.047	.083	.040
Life scientists	.112	.095	.202	.110	.219	.117
Biological scientists	.107	.091	.181	.105	.218	.109
Agricultural scientists	.095	.038	.337	.093	.174	.099
Medical scientists	.135	.113	.235	.133	.248	.144
Psychologists	.076	.053	.138	.071	.238	.190
Social scientists	.058	.088	.161	.055	.155	.059
Economists	.047	.033	.202	.046	.078	.044
Sociologists/anthropologists	.069	.039	.137	.062	.193	.117
Other social scientists	.059	.039	.167	.056	.160	.056

SOURCE: National Science Foundation

Generalized standard errors for doctoral scientists and engineers: 1981 Survey of Doctorate Recipients

Total population

Standard errors of totals		Standard errors of percents						
Size of estimate	Estimated sampling error	Base of percent	Estimated percent					
			1/99	2/98	5/95	10/90	25/75	50
100	35	500	1.55	2.19	3.40	4.69	6.76	7.81
200	49	1,000	1.10	1.55	2.41	3.31	4.78	5.52
500	78	2,000	.78	1.09	1.70	2.34	3.38	3.90
1,000	110	5,000	.49	.69	1.08	1.48	2.14	2.47
2,000	156	10,000	.35	.49	.76	1.05	1.51	1.75
5,000	245	15,000	.23	.40	.62	.86	1.23	1.43
10,000	344	20,000	.25	.35	.54	.74	1.07	1.23
15,000	419	30,000	.20	.28	.44	.60	.87	1.01
20,000	480	40,000	.17	.24	.38	.52	.76	.87
30,000	579	50,000	.16	.22	.34	.47	.68	.78
40,000	658	75,000	.13	.18	.28	.38	.55	.64
50,000	725	100,000	.11	.15	.24	.33	.48	.55
75,000	852	150,000	.09	.13	.20	.27	.39	.45
100,000	940	200,000	.08	.11	.17	.23	.34	.39
150,000	1,037	250,000	.07	.10	.15	.21	.30	.35
200,000	1,048	275,000	.07	.09	.15	.20	.29	.33
250,000	977	300,000	.06	.09	.14	.19	.28	.32
300,000	801	325,000	.06	.09	.13	.18	.27	.31

Employed in educational institutions

Standard errors of totals		Standard errors of percents						
Size of estimate	Estimated sampling error	Base of percent	Estimated percent					
			1/99	2/98	5/95	10/90	25/75	50
100	34	500	1.53	2.15	3.34	4.60	6.64	7.67
200	48	1,000	1.08	1.52	2.36	3.25	4.70	5.42
500	77	2,000	.76	1.07	1.67	2.30	3.32	3.83
1,000	108	5,000	.48	.68	.106	1.45	2.10	2.42
2,000	153	10,000	.34	.48	.75	1.03	1.48	1.71
5,000	239	15,000	.29	.39	.61	.84	1.21	1.40
10,000	334	20,000	.24	.34	.53	.73	1.05	1.21
15,000	403	30,000	.20	.28	.43	.59	.86	.99
20,000	458	40,000	.17	.24	.37	.51	.74	.86
30,000	544	50,000	.15	.21	.33	.46	.66	.77
40,000	608	75,000	.12	.18	.27	.38	.54	.63
50,000	656	100,000	.11	.15	.24	.33	.47	.54
75,000	727	125,000	.10	.14	.21	.29	.42	.48
100,000	739	160,000	.09	.12	.19	.26	.37	.43
125,000	697							
150,000	590							

Employed in business and industry

Standard errors of totals		Standard errors of percents						
Size of estimate	Estimated sampling error	Base of percent	Estimated percent					
			1/99	2/98	5/95	10/90	25/75	50
100	38	500	1.70	2.40	3.73	5.14	7.41	8.56
200	54	1,000	1.20	1.70	2.64	3.63	5.24	6.06
500	85	2,000	.85	1.20	1.87	2.57	3.71	4.28
1,000	120	5,000	.54	.76	1.18	1.62	2.35	2.71
2,000	170	10,000	.38	.54	.83	1.15	1.66	1.91
5,000	264	15,000	.31	.44	.68	.94	1.35	1.56
10,000	363	20,000	.27	.38	.59	.81	1.17	1.35
15,000	432	30,000	.22	.31	.48	.66	.96	1.11
20,000	484	40,000	.19	.27	.42	.57	.83	.96
30,000	554	50,000	.17	.24	.37	.51	.74	.86
40,000	591	60,000	.16	.22	.34	.47	.68	.78
50,000	602	70,000	.15	.20	.32	.43	.63	.72
60,000	589	80,000	.13	.19	.30	.41	.59	.68
70,000	549							

Employed by the Federal Government

Standard errors of totals		Standard errors of percents						
Size of estimate	Estimated sampling error	Base of percent	Estimated percent					
			1/99	2/98	5/95	10/90	25/75	50
100	.35	500	.156	2.19	3.41	4.69	6.78	7.82
200	49	1,000	1.10	1.55	2.41	3.32	4.79	5.53
500	77	2,000	.78	1.10	1.71	2.35	3.39	3.91
1,000	108	5,000	.49	.69	1.08	1.48	2.14	2.47
2,000	150	10,000	.35	.49	.76	1.05	1.52	1.75
5,000	221	15,000	.28	.40	.62	.86	1.24	1.43
10,000	271	20,000	.25	.35	.54	.74	1.07	1.24
15,000	270							
20,000	220							

Employed women

Standard errors of totals		Standard errors of percents						
Size of estimate	Estimated sampling error	Base of percent	Estimated percent					
			1/99	2/98	5/95	10/90	25/75	50
100	20	500	.96	1.36	2.11	2.91	4.19	4.84
200	29	1,000	.68	.96	1.49	2.05	2.97	3.42
500	45	2,000	.48	.68	1.06	1.45	2.10	2.42
1,000	64	5,000	.30	.43	.67	.92	1.33	1.53
2,000	89	10,000	.22	.30	.47	.65	.94	1.08
5,000	135	15,000	.18	.25	.39	.53	.77	.88
10,000	177	20,000	.15	.21	.33	.46	.66	.77
15,000	199	25,000	.14	.19	.30	.41	.59	.68
20,000	206	30,000	.12	.18	.27	.38	.54	.63
30,000	183							

section b

detailed statistical tables

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TABLE B-1. CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS IN THE UNITED STATES: 1981

CHARACTERISTICS	NUMBER	PERCENT
TOTAL	363,866	100.0
FIELD		
PHYSICAL SCIENTISTS........	67,693	18.6
CHEMISTS..................	45,376	12.5
PHYSICISTS/ASTRONOMERS...	22,317	6.1
MATHEMATICAL SCIENTISTS...	16,470	4.5
MATHEMATICIANS............	13,819	3.8
STATISTICIANS.....	2,651	.7
COMPUTER SPECIALISTS.......	9,066	2.5
ENVIRONMENTAL SCIENTISTS..	16,589	4.6
EARTH SCIENTISTS..........	12,605	3.5
OCEANOGRAPHERS............	1,818	.5
ATMOSPHERIC SCIENTISTS...	2,166	.6
ENGINEERS..................	58,311	16.0
AERO/ASTRO ENGINEERS.....	2,536	25.8
CHEMICAL ENGINEERS.......	7,612	2.1
CIVIL ENGINEERS...........	6,032	1.7
ELEC./ELECTRON.ENGINEERS.	10,834	3.0
MATERIALS SCIS.ENGINEERS.	6,238	1.7
MECHANICAL ENGINEERS.....	5,577	1.5
NUCLEAR ENGINEERS........	2,061	.6
SYSTEMS DESIGN ENGINEERS.	5,366	1.5
OTHER ENGINEERS..........	12,055	3.3
LIFE SCIENTISTS............	93,848	25.8
BIOLOGICAL SCIENTISTS....	54,442	15.0
AGRICULTURAL SCIENTISTS..	17,270	4.7
MEDICAL SCIENTISTS.......	22,136	6.1
PSYCHOLOGISTS..............	45,416	12.5
SOCIAL SCIENTISTS..........	56,473	15.5
ECONOMISTS................	14,294	3.9
SOCIOLOGISTS/ANTHRO......	11,909	3.3
OTHER SOCIAL SCIENTISTS..	30,270	8.3
SEX		
MEN........................	318,119	87.4
WOMEN......................	45,747	12.6
CITIZENSHIP		
USA........................	341,953	94.0
FOREIGN....................	21,692	6.0
NO REPORT..................	221	.1
RACE		
WHITE......................	322,853	88.7
BLACK......................	4,609	1.3
AM.INDIAN/ALSKN NATIVE....	2,325	.6
ASIAN/PACIFIC ISLANDER....	27,857	7.7
NO REPORT..................	6,222	1.7
AGE		
UNDER 30...................	8,591	2.4
30-34......................	52,793	14.5
35-39......................	78,623	21.6
40-44......................	68,616	18.9
45-49......................	44,839	12.3
50-54......................	37,431	10.3
55-59......................	31,211	8.6
60-64......................	21,258	5.8
65-69......................	13,521	3.7
70 OR MORE.................	6,914	1.9
NO REPORT..................	69	*
EMPLOYMENT STATUS		
FULL-TIME EMPLOYED.........	322,259	88.6
SCIENCE/ENGINEERING.......	294,525	80.9
OTHER/UNKNOWN FIELD.......	27,734	7.6
PART-TIME EMPLOYED.........	10,735	3.0
SCIENCE/ENGINEERING.......	9,108	2.5
OTHER/UNKNOWN FIELD.......	1,627	.4
POSTDOCTORATE..............	10,544	2.9
UNEMPLOYED/SEEKING.........	2,646	.7
NOT EMPLOYED/NOT SEEKING..	3,387	.9
RETIRED....................	12,530	3.4
OTHER......................	397	.1
NO REPORT..................	1,368	.4

CHARACTERISTICS	NUMBER	PERCENT
TYPE OF EMPLOYER		
BUSINESS/INDUSTRY..........	99,020	27.2
EDUCATIONAL INSTITUTIONS..	186,809	51.3
4-YEAR COLLEGES/UNIV.....	179,010	49.2
2-YEAR COLEGES............	5,035	1.4
ELEMENTARY/SEC.SCHOOLS...	2,764	.8
HOSPITALS/CLINICS..........	9,862	2.7
NONPROFIT ORGANIZATIONS...	12,581	3.5
FEDERAL GOVERNMENT.........	25,087	6.9
MILITARY/COMM. CORPS.......	2,052	.6
STATE GOVERNMENT...........	4,454	1.2
OTHER GOVERNMENT...........	2,068	.6
OTHER......................	992	.3
NOT EMPLOYED...............	20,328	5.6
NO REPORT..................	613	.2
PRIMARY WORK ACTIVITY		
RESEARCH AND DEVELOPMENT..	120,108	33.0
BASIC RESEARCH............	55,265	15.2
APPLIED RESEARCH..........	46,475	12.8
DEVELOPMENT...............	18,368	5.0
MANAGEMENT/ADMINISTRATION.	60,312	16.6
OF R&D....................	32,649	9.0
OF OTHER..................	27,663	7.6
TEACHING...................	104,956	28.8
CONSULTING.................	12,035	3.3
SALES/PROF. SERVICES.......	25,724	7.1
OTHER......................	16,441	4.5
NOT EMPLOYED...............	20,328	5.6
NO REPORT..................	3,962	1.1
YEARS OF PROF. EXPERIENCE		
1 OR LESS YEARS............	5,226	1.4
2-4 YEARS..................	28,389	7.8
5-9 YEARS..................	60,680	16.7
10-14 YEARS................	64,101	17.6
15-19 YEARS................	43,322	11.9
20-24 YEARS................	33,476	9.2
25-29 YEARS................	26,422	7.3
30-34 YEARS................	21,712	6.0
35-39 YEARS................	11,343	3.1
40 OR MORE YEARS...........	10,585	2.9
NO REPORT................	58,610	16.1
FEDERAL SUPPORT		
RECEIVING SUPPORT..........	126,704	34.8
NO SUPPORT.................	160,734	44.2
STATUS UNKNOWN.............	6,373	1.8
NOT EMPLOYED...............	49,727	13.7
NO REPORT..................	20,328	5.6
AREA OF NATIONAL INTEREST		
EDUCATION(NOT TEACHING)...	19,651	5.4
HEALTH.....................	64,522	17.7
DEFENSE....................	17,946	4.9
ENVIRONMENTAL/POLLUTION...	19,979	5.5
SPACE......................	5,273	1.5
CRIME PREVENTION/CONTROL..	3,991	1.1
FOOD/OTHER AGR. PRODUCTS..	17,047	4.7
ENERGY OR FUEL.............	36,125	9.9
OTHER NATURAL RESOURCES...	8,193	2.3
COMMUNITY DEV./SERVICES...	7,840	2.2
HOUSING....................	1,881	.5
TRANSP/COMMUNICATIONS.....	7,952	2.2
OTHER......................	18,020	5.0
NOT EMPLOYED...............	20,328	5.6
NO REPORT..................	155,108	31.6

* LESS THAN .05 PERCENT
NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-2. SALARY DISTRIBUTION OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD: 1981

FIELD	LOWER DECILE	LOWER QUARTILE	MEDIAN	UPPER QUARTILE	UPPER DECILE
TOTAL	$22,600	$27,800	$34,700	$42,900	$50,900
PHYSICAL SCIENTISTS........	24,300	29,900	36,200	44,700	52,600
CHEMISTS..................	24,000	29,800	36,200	45,000	54,000
PHYSICISTS/ASTRONOMERS...	24,900	30,000	36,100	44,200	50,700
MATHEMATICAL SCIENTISTS...	21,100	25,600	31,300	34,200	48,100
MATHEMATICIANS............	20,600	25,300	30,900	38,400	47,000
STATISTICIANS.............	23,900	27,200	34,600	41,900	52,200
COMPUTER SPECIALISTS.......	23,500	28,500	34,400	40,800	48,900
ENVIRONMENTAL SCIENTISTS..	23,500	29,400	36,500	45,100	52,200
EARTH SCIENTISTS..........	24,600	30,200	37,000	45,900	54,800
OCEANOGRAPHERS............	22,100	24,300	32,100	40,400	49,900
ATMOSPHERIC SCIENTISTS...	21,900	28,600	36,300	43,300	49,600
ENGINEERS..................	29,900	34,200	40,200	47,500	55,900
AERO/ASTRO ENGINEERS......	30,600	35,100	41,300	47,000	53,000
CHEMICAL ENGINEERS........	31,900	36,600	42,900	50,300	60,200
CIVIL ENGINEERS...........	27,600	31,100	36,800	44,400	52,500
ELEC./ELECTRON. ENGINEERS	30,200	34,700	41,100	50,100	60,000
MATERIALS SCI. ENGINEERS.	33,400	34,900	40,000	46,500	53,200
MECHANICAL ENGINEERS......	30,000	33,400	38,700	44,400	50,300
NUCLEAR ENGINEERS.........	30,000	33,500	38,300	44,100	50,900
SYSTEMS DESIGN ENGINEERS.	30,000	34,800	40,000	47,700	55,100
OTHER ENGINEERS...........	28,700	33,100	39,700	45,100	58,100
LIFE SCIENTISTS............	22,200	26,700	33,200	41,500	50,700
BIOLOGICAL SCIENTISTS.....	21,200	25,400	31,600	39,700	48,300
AGRICULTURAL SCIENTISTS..	24,100	27,800	33,600	40,500	49,900
MEDICAL SCIENTISTS........	24,300	29,900	37,900	49,600	60,600
PSYCHOLOGISTS..............	20,400	24,500	30,700	39,700	50,100
SOCIAL SCIENTISTS..........	20,600	24,900	30,800	39,600	50,100
ECONOMISTS................	23,800	29,100	36,500	46,500	56,500
SOCIOLOGISTS/ANTHRO.......	20,000	23,300	28,500	35,200	43,900
OTHER SOCIAL SCIENTISTS..	20,000	24,400	29,900	37,400	48,100

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS
SOURCE: NATIONAL SCIENCE FOUNDATION

BEST COPY AVAILABLE

TABLE 8-3. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND CITIZENSHIP: 1981

FIELD	TOTAL	USA	NON-USA	NO REPORT
TOTAL....................	363,866	341,953	21,692	221
PHYSICAL SCIENTISTS........	67,693	62,838	4,855	*
CHEMISTS..................	45,376	42,584	2,792	*
PHYSICISTS/ASTRONOMERS...	22,317	20,254	2,063	*
MATHEMATICAL SCIENTISTS...	16,470	15,531	937	2
MATHEMATICIANS............	13,819	13,035	782	2
STATISTICIANS.............	2,651	2,496	155	*
COMPUTER SPECIALISTS......	9,066	8,224	842	*
ENVIRONMENTAL SCIENTISTS..	16,589	15,513	1,076	*
EARTH SCIENTISTS..........	12,605	11,691	914	*
OCEANOGRAPHERS............	1,818	1,756	62	*
ATMOSPHERIC SCIENTISTS...	2,166	2,066	100	*
ENGINEERS.................	58,311	53,073	5,188	50
AERO/ASTRO ENGINEERS......	2,536	2,322	214	*
CHEMICAL ENGINEERS........	7,612	6,735	859	18
CIVIL ENGINEERS...........	6,032	5,696	336	*
ELEC./ELECTRON. ENGINEERS	10,834	9,700	1,134	*
MATERIALS SCI. ENGINEERS.	6,238	5,652	570	16
MECHANICAL ENGINEERS......	5,577	5,155	422	*
NUCLEAR ENGINEERS.........	2,061	1,898	163	*
SYSTEMS DESIGN ENGINEERS.	5,366	4,993	373	*
OTHER ENGINEERS...........	12,055	10,922	1,117	16
LIFE SCIENTISTS...........	93,848	89,028	4,785	35
BIOLOGICAL SCIENTISTS....	54,442	51,599	2,814	29
AGRICULTURAL SCIENTISTS..	17,270	16,611	659	*
MEDICAL SCIENTISTS.......	22,136	20,818	1,312	6
PSYCHOLOGISTS.............	45,416	44,633	735	48
SOCIAL SCIENTISTS.........	56,473	53,113	3,274	86
ECONOMISTS................	14,294	13,003	1,291	*
SOCIOLOGISTS/ANTHRO.......	11,909	11,501	403	5
OTHER SOCIAL SCIENTISTS..	30,270	28,609	1,580	81

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-4. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE, AND EMPLOYMENT STATUS: 1981

		EMPLOYED FULL-TIME			EMPLOYED PART-TIME					UNEMP/			
FIELD, SEX, AND RACE	TOTAL	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	POST- DOC- TORAL	UNEMP/ SEEKING EMP.	NOT SEEKING EMP.	RE- TIRED	OTHER	NO REPORT
ALL FIELDS													
TOTAL	363,866	322,259	294,525	27,734	10,735	9,108	1,627	10,544	2,646	3,387	12,530	397	1,368
SEX													
MEN	318,119	288,678	264,612	24,066	6,150	5,073	1,077	7,768	1,663	1,594	10,844	280	1,142
WOMEN	45,747	33,581	29,913	3,668	4,585	4,035	550	2,776	983	1,793	1,686	117	226
RACE													
WHITE	322,853	285,629	261,077	24,552	10,146	8,715	1,431	8,623	2,260	3,052	11,780	308	1,055
BLACK	4,609	4,111	3,535	576	89	37	52	120	63	9	71	63	83
AM.INDIAN/ALSKN NATIVE	2,325	2,013	1,786	227	96	38	58	89	7	13	107	*	*
ASIAN/PACIFIC ISLANDER	27,857	25,069	23,165	1,904	263	223	40	1,545	261	313	161	15	230
NO REPORT	6,222	5,437	4,962	475	141	95	46	167	55	*	411	11	*
PHYSICAL SCIENTISTS													
TOTAL	67,693	59,163	53,475	5,688	1,552	1,265	287	2,474	499	597	3,154	82	172
SEX													
MEN	63,339	56,108	50,794	5,314	1,181	963	218	2,130	416	310	2,972	70	152
WOMEN	4,354	3,055	2,681	374	371	302	69	344	83	287	182	12	20
RACE													
WHITE	59,740	52,295	47,222	5,073	1,443	1,196	247	1,781	357	557	3,055	82	170
BLACK	644	570	523	47	37	*	37	8	27	*	2	*	*
AM.INDIAN/ALSKN NATIVE	296	296	291	5	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	5,838	5,036	4,634	402	67	64	3	597	75	40	21	*	2
NO REPORT	1,175	966	805	161	5	5	*	88	40	*	76	*	*
CHEMISTS													
TOTAL	45,376	39,151	35,574	3,577	1,216	973	243	1,604	337	367	2,546	41	114
SEX													
MEN	41,718	36,594	33,333	3,261	923	745	178	1,294	269	109	2,399	33	97
WOMEN	3,658	2,557	2,241	316	293	228	65	310	68	258	147	8	17
RACE													
WHITE	40,150	34,688	31,527	3,161	1,119	916	203	1,135	255	337	2,463	41	112
BLACK	380	338	321	17	37	*	37	*	3	*	2	*	*
AM.INDIAN/ALSKN NATIVE	201	201	196	5	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	3,898	3,365	3,097	268	55	52	3	401	39	30	6	*	2
NO REPORT	747	559	433	126	5	5	*	68	40	*	75	*	*
PHYSICISTS/ASTRONOMERS													
TOTAL	22,317	20,012	17,901	2,111	336	292	44	870	162	230	608	41	58
SEX													
MEN	21,621	19,514	17,461	2,053	258	218	40	836	147	201	573	37	55
WOMEN	696	498	440	58	78	74	4	34	15	29	35	4	3
RACE													
WHITE	19,590	17,607	15,695	1,912	324	280	44	646	102	220	592	41	58
BLACK	264	232	202	30	*	*	*	8	24	*	*	*	*
AM.INDIAN/ALSKN NATIVE	95	95	95	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,940	1,671	1,537	134	12	12	*	196	36	10	15	*	*
NO REPORT	428	407	372	35	*	*	*	20	*	*	1	*	*
MATHEMATICAL SCIENTISTS													
TOTAL	16,470	15,140	13,723	1,417	327	263	64	127	97	150	590	*	39
SEX													
MEN	15,007	13,961	12,637	1,324	197	153	44	121	79	87	526	*	36
WOMEN	1,463	1,179	1,086	93	130	110	20	6	18	63	64	*	3
RACE													
WHITE	14,486	13,262	12,024	1,238	304	253	51	124	73	138	548	*	37
BLACK	200	189	168	21	*	*	*	3	*	*	8	*	*
AM.INDIAN/ALSKN NATIVE	74	74	72	2	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,221	1,175	1,051	124	8	8	*	*	24	12	*	*	2
NO REPORT	489	440	408	32	15	2	13	*	*	*	34	*	*
MATHEMATICIANS													
TOTAL	13,819	12,677	11,423	1,254	267	213	54	94	92	138	519	*	32
SEX													
MEN	12,653	11,752	10,587	1,165	159	123	36	88	79	87	459	*	29
WOMEN	1,166	925	836	89	108	90	18	6	13	51	60	*	3
RACE													
WHITE	12,258	11,215	10,095	1,120	244	203	41	91	70	131	477	*	30
BLACK	177	166	147	19	*	*	*	3	*	*	8	*	*
AM.INDIAN/ALSKN NATIVE	54	54	52	2	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	937	898	805	93	8	8	*	*	22	7	*	*	2
NO REPORT	393	344	324	20	15	2	13	*	*	*	34	*	*
STATISTICIANS													
TOTAL	2,651	2,463	2,300	163	60	50	10	33	5	12	71	*	7
SEX													
MEN	2,354	2,209	2,050	159	38	30	8	33	*	*	67	*	7
WOMEN	297	254	250	4	22	20	2	*	5	12	4	*	*
RACE													
WHITE	2,228	2,047	1,929	118	60	50	10	33	3	7	71	*	7
BLACK	23	23	21	2	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	20	20	20	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	284	277	246	31	*	*	*	*	2	5	*	*	*
NO REPORT	96	96	84	12	*	*	*	*	*	*	*	*	*
COMPUTER SPECIALISTS													
TOTAL	9,066	8,668	8,593	75	365	365	*	15	3	9	*	*	4
SEX													
MEN	8,352	8,045	7,976	69	288	288	*	14	2	*	*	*	3
WOMEN	714	623	617	6	77	77	*	1	3	9	*	*	1
RACE													
WHITE	7,942	7,562	7,498	64	358	358	*	4	5	9	*	*	4
BLACK	20	15	15	*	5	5	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	17	17	17	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	886	886	886	*	*	*	*	*	*	*	*	*	*
NO REPORT	201	188	177	11	2	2	*	11	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS													
TOTAL	16,589	15,303	14,658	645	531	473	58	195	91	35	331	16	87
SEX													
MEN	15,683	14,554	13,945	609	446	391	55	166	81	15	320	15	86
WOMEN	906	749	713	36	85	82	3	29	10	20	11	1	1
RACE													
WHITE	15,547	14,318	13,682	636	517	459	58	173	71	35	330	16	87
BLACK	41	41	39	2	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	56	56	56	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	749	702	697	5	7	7	*	22	18	*	*	*	*
NO REPORT	196	186	184	2	7	7	*	*	2	*	1	*	*

* NO CASES REPORTED

TABLE B-4. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE, AND EMPLOYMENT STATUS: 1981
CONTINUED

FIELD, SEX, AND RACE	TOTAL	EMPLOYED FULL-TIME TOTAL	EMPLOYED FULL-TIME SCI/ ENG.	EMPLOYED FULL-TIME OTHER/ UNKNOWN FIELD	EMPLOYED PART-TIME TOTAL	EMPLOYED PART-TIME SCI/ ENG.	EMPLOYED PART-TIME OTHER/ UNKNOWN FIELD	POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
EARTH SCIENTISTS													
TOTAL....................	12,605	11,613	11,056	557	407	359	48	101	89	30	294	6	65
SEX													
MEN..................	11,990	11,099	10,569	530	355	309	46	89	79	15	283	6	64
WOMEN................	615	514	487	27	52	50	2	12	10	15	11	*	1
RACE													
WHITE................	11,845	10,887	10,335	552	398	350	48	97	69	30	293	6	65
BLACK................	32	32	30	2	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	47	47	47	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	535	511	508	3	2	2	*	4	18	*	*	*	*
NO REPORT............	146	136	136	*	7	7	*	*	2	*	1	*	*
OCEANOGRAPHERS													
TOTAL....................	1,818	1,683	1,639	44	73	73	*	26	2	2	15	10	7
SEX													
MEN..................	1,612	1,513	1,478	35	49	49	*	17	2	*	15	9	7
WOMEN................	206	170	161	9	24	24	*	9	*	2	*	1	*
RACE													
WHITE................	1,701	1,571	1,529	42	73	73	*	21	2	2	15	10	7
BLACK................	7	7	7	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	7	7	7	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	102	97	95	2	*	*	*	5	*	*	*	*	*
NO REPORT............	1	1	1	*	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS													
TOTAL....................	2,166	2,007	1,963	44	51	41	10	68	*	3	22	*	15
SEX													
MEN..................	2,081	1,942	1,898	44	42	33	9	60	*	*	22	*	15
WOMEN................	85	65	65	*	9	8	1	8	*	3	*	*	*
RACE													
WHITE................	2,001	1,860	1,818	42	46	36	10	55	*	3	22	*	15
BLACK................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	2	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	112	94	94	*	5	5	*	13	*	*	*	*	*
NO REPORT............	49	49	47	2	*	*	*	*	*	*	*	*	*
ENGINEERS													
TOTAL....................	58,311	55,896	52,328	3,568	838	611	227	219	46	135	989	21	167
SEX													
MEN..................	57,528	55,198	51,646	3,552	787	567	220	209	42	124	987	16	165
WOMEN................	783	698	682	16	51	44	7	10	4	11	2	5	2
RACE													
WHITE................	47,678	45,619	42,671	2,948	773	592	181	160	42	69	913	19	83
BLACK................	270	270	213	57	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	437	347	347	*	46	*	46	*	*	*	44	*	*
ASIAN/PACIFIC ISLANDER	9,055	8,807	8,257	550	17	17	*	59	4	66	16	2	84
NO REPORT............	871	853	840	13	2	2	*	*	*	*	16	*	*
AERO/ASTRO ENGINEERS													
TOTAL....................	2,536	2,433	2,155	278	35	35	*	50	*	2	16	*	*
SEX													
MEN..................	2,496	2,395	2,117	278	35	35	*	50	*	*	16	*	*
WOMEN................	40	38	38	*	*	*	*	*	*	2	*	*	*
RACE													
WHITE................	2,250	2,147	1,904	243	35	35	*	50	*	2	16	*	*
BLACK................	10	10	10	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	260	260	225	35	*	*	*	*	*	*	*	*	*
NO REPORT............	16	16	16	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS													
TOTAL....................	7,612	7,062	6,316	746	52	20	32	32	17	68	336	16	29
SEX													
MEN..................	7,553	7,014	6,269	745	48	16	32	30	16	64	336	16	29
WOMEN................	59	48	47	1	4	4	*	2	1	4	*	*	*
RACE													
WHITE................	5,895	5,416	4,775	641	52	20	32	28	16	2	336	16	29
BLACK................	37	37	37	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	5	5	5	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,621	1,550	1,458	92	*	*	*	4	1	66	*	*	*
NO REPORT............	54	54	41	13	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS													
TOTAL....................	6,032	5,768	5,442	326	136	78	58	2	*	*	108	*	18
SEX													
MEN..................	5,937	5,688	5,362	326	123	72	51	*	*	*	108	*	18
WOMEN................	95	80	80	*	13	6	7	2	*	*	*	*	*
RACE													
WHITE................	4,788	4,529	4,317	212	131	73	58	2	*	*	108	*	18
BLACK................	24	24	20	4	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	11	11	11	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,163	1,158	1,048	110	5	5	*	*	*	*	*	*	*
NO REPORT............	46	46	46	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL....................	10,834	10,462	9,846	616	205	205	*	3	*	14	138	*	12
SEX													
MEN..................	10,695	10,332	9,718	614	196	196	*	3	*	14	138	*	12
WOMEN................	139	130	128	2	9	9	*	*	*	*	*	*	*
RACE													
WHITE................	8,952	8,608	8,084	524	205	205	*	3	*	14	122	*	*
BLACK................	43	43	39	4	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	131	131	131	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,578	1,550	1,462	88	*	*	*	*	*	*	16	*	12
NO REPORT............	130	130	130	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS													
TOTAL....................	6,238	5,993	5,598	395	134	91	43	2	*	3	72	*	34
SEX													
MEN..................	6,133	5,899	5,508	391	130	87	43	*	*	*	70	*	34
WOMEN................	105	94	90	4	4	4	*	2	*	3	2	*	*
RACE													
WHITE................	5,234	5,007	4,650	357	132	89	43	2	*	3	56	*	34
BLACK................	5	5	5	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	14	14	14	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	818	818	780	38	*	*	*	*	*	*	*	*	*
NO REPORT............	167	149	149	*	2	2	*	*	*	*	16	*	*

* NO CASES REPORTED

TABLE B-4. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE, AND EMPLOYMENT STATUS: 1985
CONTINUED

FIELD, SEX, AND RACE	TOTAL	EMPLOYED FULL-TIME			EMPLOYED PART-TIME			POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
		TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD						
MECHANICAL ENGINEERS													
TOTAL....................	5,577	5,345	4,969	376	26	10	16	*	*	35	171	*	*
SEX													
MEN..................	5,537	5,315	4,943	372	16	*	16	*	*	35	171	*	*
WOMEN................	40	30	26	4	10	10	*	*	*	*	*	*	*
RACE													
WHITE................	4,307	4,119	3,844	275	26	10	16	*	*	35	127	*	*
BLACK................	10	10	10	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	64	20	20	*	*	*	*	*	*	*	44	*	*
ASIAN/PACIFIC ISLANDER	1,045	1,045	944	101	*	*	*	*	*	*	*	*	*
NO REPORT............	151	151	151	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL....................	2,061	2,061	1,969	92	*	*	*	*	*	*	*	*	*
SEX													
MEN..................	2,043	2,043	1,951	92	*	*	*	*	*	*	*	*	*
WOMEN................	18	18	18	*	*	*	*	*	*	*	*	*	*
RACE													
WHITE................	1,602	1,602	1,580	22	*	*	*	*	*	*	*	*	*
BLACK................	3	3	3	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	376	376	306	70	*	*	*	*	*	*	*	*	*
NO REPORT............	80	80	80	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS													
TOTAL....................	5,366	5,327	5,159	168	22	22	*	*	3	11	*	3	*
SEX													
MEN..................	5,239	5,212	5,048	164	16	16	*	*	*	11	*	*	*
WOMEN................	127	115	111	4	6	6	*	*	3	*	*	3	*
RACE													
WHITE................	4,736	4,702	4,538	164	20	20	*	*	*	11	*	3	*
BLACK................	6	6	2	4	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	93	93	93	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	465	460	460	*	2	2	*	*	3	*	*	*	*
NO REPORT............	66	66	66	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS													
TOTAL....................	12,055	11,445	10,874	571	228	150	78	130	26	2	148	2	74
SEX													
MEN..................	11,895	11,300	10,730	570	223	145	78	126	26	*	148	*	72
WOMEN................	160	145	144	1	5	5	*	4	*	2	*	2	2
RACE													
WHITE................	9,914	9,489	8,979	510	172	140	32	75	26	2	148	*	2
BLACK................	132	132	87	45	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	119	73	73	*	46	*	46	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,729	1,590	1,574	16	10	10	*	55	*	*	*	2	72
NO REPORT............	161	161	161	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS													
TOTAL....................	93,848	77,772	73,742	4,030	2,286	1,941	345	6,657	1,007	1,480	4,140	104	402
SEX													
MEN..................	78,627	67,618	64,306	3,312	1,198	979	219	4,655	551	720	3,479	71	335
WOMEN................	15,221	10,154	9,436	718	1,088	962	126	2,002	456	760	661	33	67
RACE													
WHITE................	84,329	70,060	66,451	3,609	2,156	1,840	316	5,640	942	1,308	3,842	84	297
BLACK................	1,185	993	920	73	14	8	6	82	19	4	40	7	26
AM.INDIAN/ALSKN NATIVE	551	450	427	23	23	16	7	53	*	13	12	*	*
ASIAN/PACIFIC ISLANDER	6,416	5,150	4,830	320	88	72	16	839	44	155	48	13	79
NO REPORT............	1,367	1,119	1,114	5	5	5	*	43	2	*	198	*	*
BIOLOGICAL SCIENTISTS													
TOTAL....................	54,442	43,289	40,775	2,514	1,496	1,228	268	4,888	866	876	2,699	58	270
SEX													
MEN..................	43,796	36,686	34,738	1,948	637	480	157	3,318	467	311	2,134	35	208
WOMEN................	10,646	6,603	6,037	566	859	748	111	1,570	399	565	565	23	62
RACE													
WHITE................	48,663	38,730	36,468	2,262	1,401	1,155	246	4,166	817	815	2,504	44	186
BLACK................	663	571	512	59	12	6	6	28	19	2	19	7	5
AM.INDIAN/ALSKN NATIVE	335	272	258	14	23	16	7	16	*	12	12	*	*
ASIAN/PACIFIC ISLANDER	4,025	3,099	2,925	174	55	46	9	671	30	47	37	7	79
NO REPORT............	756	617	612	5	5	5	*	7	*	*	127	*	*
AGRICULTURAL SCIENTISTS													
TOTAL....................	17,270	15,554	14,474	1,080	184	144	40	141	64	121	1,119	9	78
SEX													
MEN..................	16,740	15,171	14,141	1,030	158	122	36	114	57	73	1,084	7	76
WOMEN................	530	383	333	50	26	22	4	27	7	48	35	2	2
RACE													
WHITE................	15,998	14,480	13,504	976	184	144	40	116	56	65	1,031	9	57
BLACK................	209	167	165	2	*	*	*	*	*	*	21	*	21
AM.INDIAN/ALSKN NATIVE	113	113	104	9	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	771	696	603	93	*	*	*	3	6	56	10	*	*
NO REPORT............	179	98	98	*	*	*	*	22	2	*	57	*	*
MEDICAL SCIENTISTS													
TOTAL....................	22,136	18,929	18,493	436	606	569	37	1,628	77	483	322	37	54
SEX													
MEN..................	18,091	15,761	15,427	334	403	377	26	1,223	27	336	261	29	51
WOMEN................	4,045	3,168	3,066	102	203	192	11	405	50	147	61	8	3
RACE													
WHITE................	19,668	16,850	16,479	371	571	541	30	1,358	69	428	307	31	54
BLACK................	313	255	243	12	2	2	*	54	*	2	*	*	*
AM.INDIAN/ALSKN NATIVE	103	65	65	*	*	*	*	37	*	1	*	*	*
ASIAN/PACIFIC ISLANDER	1,620	1,355	1,302	53	33	26	7	165	8	52	1	6	*
NO REPORT............	432	404	404	*	*	*	*	14	*	*	14	*	*
PSYCHOLOGISTS													
TOTAL....................	45,416	39,468	36,080	3,388	3,126	2,890	236	470	488	447	1,172	48	197
SEX													
MEN..................	32,599	29,819	27,460	2,359	1,095	1,010	85	290	344	172	733	*	146
WOMEN................	12,817	9,649	8,620	1,029	2,031	1,880	151	180	144	275	439	48	51
RACE													
WHITE................	42,666	37,028	33,948	3,080	2,978	2,753	225	416	460	435	1,132	35	182
BLACK................	853	780	659	121	25	18	7	11	8	2	10	2	15
AM.INDIAN/ALSKN NATIVE	475	417	365	52	22	22	*	36	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	609	530	486	44	42	42	*	7	20	10	*	*	*
NO REPORT............	813	713	622	91	59	55	4	*	*	*	30	11	*

* NO CASES REPORTED

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TABLE B-4. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE, AND EMPLOYMENT STATUS: 1981
CONTINUED

FIELD, SEX, AND RACE	TOTAL	EMPLOYED FULL-TIME			EMPLOYED PART-TIME			POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
		TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD						
SOCIAL SCIENTISTS													
TOTAL......................	56,473	50,849	41,926	8,923	1,710	1,300	410	387	413	534	2,154	126	300
SEX													
MEN....................	46,984	43,375	35,848	7,527	958	722	236	183	148	166	1,827	108	219
WOMEN..................	9,489	7,474	6,078	1,396	752	578	174	204	265	368	327	18	81
RACE													
WHITE..................	50,465	45,485	37,581	7,904	1,617	1,264	353	325	310	501	1,960	72	195
BLACK..................	1,396	1,253	998	255	8	6	2	16	9	3	11	54	42
AM.INDIAN/ALSKN NATIVE	419	356	211	145	5	*	5	*	7	*	51	*	*
ASIAN/PACIFIC ISLANDER	3,083	2,783	2,324	459	34	13	21	21	76	30	76	*	63
NO REPORT.............	1,110	972	812	160	46	17	29	25	11	*	56	*	*
ECONOMISTS													
TOTAL......................	14,294	13,095	10,819	2,276	313	244	69	18	47	109	616	28	68
SEX													
MEN....................	13,031	12,078	9,957	2,121	202	166	36	15	47	61	547	28	53
WOMEN..................	1,263	1,017	862	155	111	78	33	3	*	48	69	*	15
RACE													
WHITE..................	12,574	11,521	9,422	2,099	313	244	69	3	*	109	560	*	68
BLACK..................	234	204	148	56	*	*	*	*	*	*	2	28	*
AM.INDIAN/ALSKN NATIVE	242	224	135	89	*	*	*	*	*	*	18	*	*
ASIAN/PACIFIC ISLANDER	1,165	1,085	1,053	32	*	*	*	15	47	*	18	*	*
NO REPORT.............	79	61	61	*	*	*	*	*	*	*	18	*	*
SOCIOLOGISTS/ANTHRO.													
TOTAL......................	11,909	10,386	8,551	1,835	490	395	95	122	157	132	510	48	64
SEX													
MEN....................	8,639	7,778	6,338	1,440	232	188	44	54	52	30	406	44	43
WOMEN..................	3,270	2,608	2,213	395	258	207	51	68	105	102	104	4	21
RACE													
WHITE..................	10,804	9,474	7,836	1,638	442	375	67	112	128	102	462	22	62
BLACK..................	343	298	227	71	2	*	2	5	7	*	5	26	*
AM.INDIAN/ALSKN NATIVE	65	65	38	27	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	427	334	304	30	10	10	*	5	11	30	35	*	2
NO REPORT.............	270	215	146	69	36	10	26	*	11	*	8	*	*
OTHER SOCIAL SCIENTISTS													
TOTAL......................	30,270	27,368	22,556	4,812	907	661	246	247	209	293	1,028	50	168
SEX													
MEN....................	25,314	23,519	19,553	3,966	524	368	156	114	49	75	874	36	123
WOMEN..................	4,956	3,849	3,003	846	383	293	90	133	160	218	154	14	45
RACE													
WHITE..................	27,087	24,490	20,323	4,167	862	645	217	210	182	290	938	50	65
BLACK..................	819	751	623	128	6	6	*	11	2	3	4	*	42
AM.INDIAN/ALSKN NATIVE	112	67	38	29	5	*	5	*	7	*	33	*	*
ASIAN/PACIFIC ISLANDER	1,491	1,364	967	397	24	3	21	1	18	*	23	*	61
NO REPORT.............	761	696	605	91	10	7	3	25	*	*	30	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 8-5. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1981

FIELD AND AGE	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
ALL FIELDS															
TOTAL	363,866	99,020	186,809	179,010	5,035	2,764	9,862	12,581	25,087	2,052	4,454	2,068	992	20,328	613
UNDER 30	8,591	2,331	4,641	4,592	34	15	441	407	320	21	57	59	53	236	25
30-34	52,793	15,575	27,804	27,035	448	321	2,108	2,123	2,302	211	732	333	66	1,518	21
35-39	78,623	24,188	38,173	36,408	1,207	558	2,596	2,854	6,509	609	1,133	475	278	1,722	86
40-44	68,616	20,055	35,876	34,240	1,114	522	1,373	2,650	5,098	752	784	355	375	1,100	198
45-49	44,839	12,670	24,444	23,489	647	308	837	1,378	3,463	271	636	263	7	833	37
50-54	37,431	9,148	21,320	20,255	519	546	884	1,005	2,928	86	588	271	158	964	79
55-59	31,211	7,479	17,375	16,611	551	213	925	1,029	2,529	81	260	138	40	1,299	56
60-64	21,258	4,734	11,218	10,754	256	208	475	764	1,272	21	165	92	10	2,447	60
65-69	13,521	2,038	5,204	4,920	218	66	160	202	595	*	78	68	5	5,160	11
70 OR OVER	6,914	797	730	682	41	7	63	169	71	*	21	10	*	5,013	40
NO REPORT	69	5	24	24	*	*	*	*	*	*	*	4	*	36	*
PHYSICAL SCIENTISTS															
TOTAL	67,693	27,401	28,333	26,897	1,162	274	518	2,071	4,343	136	258	100	*	4,504	29
UNDER 30	2,148	917	951	951	*	*	17	107	70	4	23	23	*	36	*
30-34	9,031	4,446	3,476	3,410	64	2	74	384	301	57	44	12	*	237	*
35-39	12,803	5,738	5,233	4,791	373	69	129	361	991	46	51	18	*	232	4
40-44	12,866	4,997	5,958	5,580	307	71	110	532	1,026	29	38	37	*	122	17
45-49	8,357	3,327	3,803	3,668	123	12	54	266	607	*	55	*	*	239	6
50-54	7,447	2,930	3,539	3,404	102	33	8	128	475	*	36	10	*	321	*
55-59	5,947	2,663	2,292	2,153	116	23	116	71	503	*	4	*	*	296	2
60-64	4,584	1,595	1,926	1,851	16	59	10	190	220	*	7	*	*	636	*
65-69	3,211	671	973	920	48	5	*	23	150	*	*	*	*	1,394	*
70 OR OVER	1,295	117	180	167	13	*	*	9	*	*	*	*	*	989	*
NO REPORT	4	*	2	2	*	*	*	*	*	*	*	*	*	2	*
CHEMISTS															
TOTAL	45,376	22,250	15,772	14,621	923	228	405	1,033	2,131	65	203	100	*	3,405	12
UNDER 30	1,629	773	647	647	*	*	17	71	37	2	23	23	*	36	*
30-34	5,992	3,492	1,964	1,911	51	2	46	157	128	16	40	12	*	137	*
35-39	8,108	4,196	2,945	2,590	286	69	127	140	437	18	51	18	*	172	4
40-44	8,177	4,141	3,226	2,883	276	67	69	218	360	29	35	37	*	62	*
45-49	5,616	2,887	1,992	1,887	94	11	51	171	353	*	7	*	*	149	6
50-54	5,120	2,441	2,014	1,904	102	8	7	68	286	*	36	10	*	258	*
55-59	3,823	2,167	1,003	919	61	23	78	67	296	*	4	*	*	206	2
60-64	3,371	1,484	1,143	1,084	16	43	10	123	113	*	7	*	*	491	*
65-69	2,486	565	697	655	37	5	*	9	121	*	*	*	*	1,094	*
70 OR OVER	1,050	104	139	139	*	*	*	9	*	*	*	*	*	798	*
NO REPORT	4	*	2	2	*	*	*	*	*	*	*	*	*	2	*
PHYSICISTS/ASTRONOMERS															
TOTAL	22,317	5,151	12,561	12,276	239	46	113	1,038	2,212	71	55	*	*	1,099	17
UNDER 30	519	144	304	304	*	*	*	36	33	2	*	*	*	*	*
30-34	3,039	954	1,512	1,499	13	*	28	227	173	41	4	*	*	100	*
35-39	4,695	1,542	2,288	2,201	87	*	2	221	554	28	*	*	*	60	*
40-44	4,689	856	2,732	2,697	31	4	41	314	666	*	3	*	*	60	17
45-49	2,741	440	1,811	1,781	29	1	3	95	254	*	48	*	*	90	*
50-54	2,327	489	1,525	1,500	*	25	1	60	189	*	*	*	*	63	*
55-59	2,124	496	1,289	1,234	55	*	38	4	207	*	*	*	*	90	*
60-64	1,213	111	783	767	*	16	*	67	107	*	*	*	*	145	*
65-69	725	106	276	265	11	*	*	14	29	*	*	*	*	300	*
70 OR OVER	245	13	41	28	13	*	*	*	*	*	*	*	*	191	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MATHEMATICAL SCIENTISTS															
TOTAL	16,470	1,621	12,739	12,294	302	143	*	263	852	57	2	*	14	876	46
UNDER 30	452	45	388	388	*	*	*	*	5	*	*	*	*	14	*
30-34	2,063	315	1,627	1,569	56	2	*	30	77	*	*	*	*	14	*
35-39	3,795	438	2,877	2,690	142	45	*	21	309	*	*	*	14	134	2
40-44	3,686	297	2,977	2,926	31	20	*	64	213	57	*	*	*	49	29
45-49	2,163	214	1,835	1,803	3	29	*	55	34	*	*	*	*	25	*
50-54	1,554	86	1,315	1,237	41	37	*	2	129	*	*	*	*	22	*
55-59	1,070	101	821	795	22	4	*	42	60	*	2	*	*	29	15
60-64	732	47	582	572	7	3	*	44	15	*	*	*	*	44	*
65-69	651	59	290	289	*	1	*	1	10	*	*	*	*	291	*
70 OR OVER	302	19	26	24	*	2	*	4	*	*	*	*	*	253	*
NO REPORT	2	*	1	1	*	*	*	*	*	*	*	*	*	1	*
MATHEMATICIANS															
TOTAL	13,819	1,159	11,007	10,564	300	143	*	224	553	57	2	*	*	781	36
UNDER 30	379	39	326	326	*	*	*	*	*	*	*	*	*	14	*
30-34	1,727	234	1,400	1,342	56	2	*	15	69	*	*	*	*	9	*
35-39	3,135	328	2,494	2,307	142	45	*	13	171	*	*	*	*	129	*
40-44	3,150	214	2,618	2,567	31	20	*	64	119	57	*	*	*	49	29
45-49	1,773	109	1,572	1,540	3	29	*	41	31	*	*	*	*	20	*
50-54	1,308	68	1,113	1,035	41	37	*	2	105	*	*	*	*	20	*
55-59	931	70	740	716	20	4	*	40	43	*	2	*	*	29	7
60-64	590	34	474	464	7	3	*	44	15	*	*	*	*	23	*
65-69	560	44	251	250	*	1	*	1	*	*	*	*	*	264	*
70 OR OVER	264	19	18	16	*	2	*	4	*	*	*	*	*	223	*
NO REPORT	2	*	1	1	*	*	*	*	*	*	*	*	*	1	*
STATISTICIANS															
TOTAL	2,651	462	1,732	1,730	2	*	*	39	299	*	*	*	14	95	10
UNDER 30	73	6	62	62	*	*	*	*	5	*	*	*	*	*	*
30-34	336	81	227	227	*	*	*	15	8	*	*	*	*	5	*
35-39	660	110	383	383	*	*	*	8	138	*	*	*	14	5	2
40-44	536	83	359	359	*	*	*	*	94	*	*	*	*	*	*
45-49	390	105	263	263	*	*	*	14	3	*	*	*	*	5	*
50-54	246	18	202	202	*	*	*	*	24	*	*	*	*	2	*
55-59	139	31	81	79	2	*	*	2	17	*	*	*	*	*	8
60-64	142	13	108	108	*	*	*	*	*	*	*	*	*	21	*
65-69	91	15	39	39	*	*	*	*	10	*	*	*	*	27	*
70 OR OVER	38	*	8	8	*	*	*	*	*	*	*	*	*	30	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-5. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AGE	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
COMPUTER SPECIALISTS															
TOTAL......................	9,066	5,212	3,010	2,954	49	7	20	276	355	23	48	104	*	18	*
UNDER 30..............	168	78	90	90	*	*	*	*	*	*	*	*	*	*	*
30-34..................	1,719	1,039	616	609	*	7	*	40	6	3	*	*	*	15	*
35-39..................	2,977	1,884	737	731	6	*	*	134	141	3	4	71	*	3	*
40-44..................	1,924	1,062	748	705	43	*	20	39	56	17	*	2	*	*	*
45-49..................	1,028	665	229	229	*	*	*	14	117	*	3	*	*	*	*
50-54..................	509	198	215	215	*	*	*	13	13	*	39	31	*	*	*
55-59..................	466	166	242	242	*	*	*	36	22	*	*	*	*	*	*
60-64..................	182	89	91	91	*	*	*	*	*	*	2	*	*	*	*
65-69..................	65	41	24	24	*	*	*	*	*	*	*	*	*	*	*
70 OR OVER............	28	10	18	18	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS															
TOTAL......................	16,589	4,788	6,772	6,611	128	33	*	623	3,069	115	562	54	16	560	30
UNDER 30..............	313	58	218	218	*	*	*	15	18	*	4	*	*	*	*
30-34..................	2,460	793	1,044	1,032	12	*	*	65	332	12	150	7	*	57	*
35-39..................	3,506	1,247	1,156	1,156	*	*	*	217	627	38	180	19	9	13	*
40-44..................	3,315	896	1,483	1,448	26	9	*	146	672	53	15	7	*	34	9
45-49..................	2,388	521	1,068	1,042	26	*	*	42	551	*	125	*	7	74	*
50-54..................	1,599	546	626	599	12	15	*	55	279	12	35	15	*	31	*
55-59..................	1,309	232	627	581	37	9	*	41	337	*	7	*	*	15	*
60-64..................	847	203	330	316	14	*	*	20	178	*	44	6	*	52	14
65-69..................	520	123	183	182	1	*	*	21	62	*	2	*	*	129	*
70 OR OVER............	332	119	37	37	*	*	*	1	13	*	*	*	*	155	7
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
EARTH SCIENTISTS															
TOTAL......................	12,605	4,213	5,019	4,858	128	33	*	309	2,060	23	412	54	7	484	24
UNDER 30..............	176	32	124	124	*	*	*	2	18	*	*	*	*	*	*
30-34..................	1,676	697	632	620	12	*	*	36	212	*	44	7	*	48	*
35-39..................	2,312	1,036	647	647	*	*	*	99	345	*	160	19	*	6	*
40-44..................	2,607	775	1,195	1,160	26	9	*	60	503	23	15	7	*	20	9
45-49..................	1,985	497	952	926	26	*	*	34	313	*	117	*	7	65	*
50-54..................	1,370	513	531	504	12	15	*	31	225	*	24	15	*	31	*
55-59..................	1,035	275	522	476	37	9	*	12	205	*	6	*	*	15	*
60-64..................	685	160	241	227	14	*	*	13	170	*	44	6	*	43	8
65-69..................	441	109	145	144	1	*	*	21	56	*	2	*	*	108	*
70 OR OVER............	318	119	30	30	*	*	*	1	13	*	*	*	*	148	7
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OCEANOGRAPHERS															
TOTAL......................	1,818	184	964	964	*	*	*	86	367	29	137	*	9	36	6
UNDER 30..............	4	*	4	4	*	*	*	*	*	*	*	*	*	*	*
30-34..................	442	59	213	213	*	*	*	9	52	*	100	*	*	9	*
35-39..................	592	82	330	330	*	*	*	41	103	6	20	*	9	1	*
40-44..................	289	9	191	191	*	*	*	27	37	23	*	*	*	2	*
45-49..................	214	13	81	81	*	*	*	*	103	*	8	*	*	9	*
50-54..................	96	*	64	64	*	*	*	*	23	*	9	*	*	*	*
55-59..................	84	7	33	33	*	*	*	9	35	*	*	*	*	*	*
60-64..................	49	*	35	35	*	*	*	*	8	*	*	*	*	*	6
65-69..................	34	14	6	6	*	*	*	*	6	*	*	*	*	8	*
70 OR OVER............	14	*	7	7	*	*	*	*	*	*	*	*	*	7	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS															
TOTAL......................	2,166	391	789	789	*	*	*	228	642	63	13	*	*	40	*
UNDER 30..............	133	26	90	90	*	*	*	13	*	*	4	*	*	*	*
30-34..................	342	37	199	199	*	*	*	20	68	12	6	*	*	*	*
35-39..................	602	129	179	179	*	*	*	77	179	32	*	*	*	6	*
40-44..................	419	112	97	97	*	*	*	59	132	7	*	*	*	12	*
45-49..................	189	11	35	35	*	*	*	8	135	*	*	*	*	*	*
50-54..................	133	33	31	31	*	*	*	24	31	12	2	*	*	*	*
55-59..................	190	*	72	72	*	*	*	20	97	*	1	*	*	*	*
60-64..................	113	43	54	54	*	*	*	7	*	*	*	*	*	9	*
65-69..................	45	*	32	32	*	*	*	*	*	*	*	*	*	13	*
70 OR OVER............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENGINEERS															
TOTAL......................	58,311	31,659	18,083	18,018	35	30	18	2,338	3,805	504	135	222	160	1,358	29
UNDER 30..............	936	721	208	208	*	*	*	3	4	*	*	*	*	*	*
30-34..................	7,609	4,742	2,015	2,015	*	*	7	552	98	14	22	78	2	79	*
35-39..................	12,008	7,484	2,902	2,902	*	*	4	327	1,125	130	29	*	*	7	*
40-44..................	13,052	7,590	3,616	3,598	18	*	*	513	831	267	24	37	123	26	25
45-49..................	8,873	4,665	3,246	3,241	5	*	*	246	590	32	47	10	*	37	*
50-54..................	6,264	2,979	2,454	2,442	12	*	7	227	484	17	*	35	35	22	4
55-59..................	5,097	2,006	2,213	2,213	*	*	*	294	398	44	*	44	*	98	*
60-64..................	2,763	1,062	969	969	*	*	*	141	202	*	*	2	*	387	*
65-69..................	1,289	304	420	390	*	30	*	*	57	*	13	16	*	479	*
70 OR OVER............	404	106	40	40	*	*	*	35	16	*	*	*	*	207	*
NO REPORT.............	16	*	*	*	*	*	*	*	*	*	*	*	*	16	*
AERO/ASTRO ENGINEERS															
TOTAL......................	2,536	1,126	675	675	*	*	*	176	425	116	*	*	*	18	*
UNDER 30..............	42	*	42	42	*	*	*	*	*	*	*	*	*	*	*
30-34..................	268	162	67	67	*	*	*	34	5	*	*	*	*	*	*
35-39..................	479	217	91	91	*	*	*	2	169	*	*	*	*	*	*
40-44..................	802	327	135	135	*	*	*	46	181	113	*	*	*	*	*
45-49..................	288	84	128	128	*	*	*	47	26	3	*	*	*	*	*
50-54..................	193	50	60	60	*	*	*	47	36	*	*	*	*	*	*
55-59..................	333	235	96	96	*	*	*	*	*	*	*	*	*	2	*
60-64..................	107	51	48	48	*	*	*	*	8	*	*	*	*	*	*
65-69..................	24	*	8	8	*	*	*	*	*	*	*	*	*	16	*
70 OR OVER............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE 6-5. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1981
CONTINUED

			EDUCATIONAL INSTITUTIONS												
FIELD AND AGE	TOTAL	BUSINESS/ INDUSTRY	TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
CHEMICAL ENGINEERS															
TOTAL	7,612	5,342	1,380	1,380	*	*	*	143	258	*	23	*	*	466	*
UNDER 30	396	282	114	114	*	*	*	*	*	*	*	*	*	*	*
30-34	1,167	970	92	92	*	*	*	92	13	*	*	*	*	*	*
35-39	1,426	1,103	177	177	*	*	*	51	70	*	23	*	*	2	*
40-44	1,120	818	190	190	*	*	*	*	111	*	*	*	*	1	*
45-49	1,398	943	453	453	*	*	*	*	*	*	*	*	*	2	*
50-54	743	665	71	71	*	*	*	*	7	*	*	*	*	*	*
55-59	594	354	167	167	*	*	*	*	41	*	*	*	*	32	*
60-64	500	175	116	116	*	*	*	*	16	*	*	*	*	193	*
65-69	236	32	*	*	*	*	*	*	*	*	*	*	*	204	*
70 OR OVER	32	*	*	*	*	*	*	*	*	*	*	*	*	32	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS															
TOTAL	6,032	2,468	2,789	2,786	3	*	7	69	147	131	88	104	99	126	4
UNDER 30	2	*	*	*	*	*	*	*	2	*	*	*	*	*	*
30-34	651	285	336	336	*	*	7	*	1	*	*	22	*	*	*
35-39	1,167	640	423	423	*	*	*	23	11	64	6	*	*	*	*
40-44	1,863	877	735	732	3	*	*	46	68	6	24	8	99	*	*
45-49	759	217	487	487	*	*	*	*	*	*	45	10	*	*	*
50-54	718	196	459	459	*	*	*	*	7	17	*	35	*	*	4
55-59	406	85	221	221	*	*	*	*	43	44	*	13	*	*	*
60-64	241	121	80	80	*	*	*	*	*	*	*	*	*	40	*
65-69	176	33	48	48	*	*	*	*	15	*	13	16	*	51	*
70 OR OVER	49	14	*	*	*	*	*	*	*	*	*	*	*	35	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS															
TOTAL	10,834	6,189	3,630	3,630	*	*	*	264	524	3	*	60	*	164	*
UNDER 30	11	8	3	3	*	*	*	*	*	*	*	*	*	*	*
30-34	1,590	1,087	371	371	*	*	*	110	22	*	*	*	*	*	*
35-39	2,455	1,476	740	740	*	*	*	4	235	*	*	*	*	*	*
40-44	2,408	1,609	572	572	*	*	*	120	63	3	*	29	*	12	*
45-49	1,674	877	762	762	*	*	*	*	35	*	*	*	*	*	*
50-54	1,083	571	387	387	*	*	*	14	111	*	*	*	*	*	*
55-59	1,026	405	547	547	*	*	*	*	29	*	*	31	*	14	*
60-64	272	54	186	186	*	*	*	16	*	*	*	*	*	16	*
65-69	209	56	62	62	*	*	*	*	29	*	*	*	*	62	*
70 OR OVER	106	46	*	*	*	*	*	*	*	*	*	*	*	60	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS															
TOTAL	6,238	4,067	1,496	1,496	*	*	*	178	388	*	*	*	*	109	*
UNDER 30	149	145	2	2	*	*	*	*	2	*	*	*	*	*	*
30-34	787	599	184	184	*	*	*	1	3	*	*	*	*	*	*
35-39	1,199	915	117	117	*	*	*	57	110	*	*	*	*	*	*
40-44	1,229	928	276	276	*	*	*	*	25	*	*	*	*	*	*
45-49	897	471	319	319	*	*	*	*	107	*	*	*	*	*	*
50-54	674	431	177	177	*	*	*	50	16	*	*	*	*	*	*
55-59	633	311	170	170	*	*	*	37	81	*	*	*	*	34	*
60-64	485	219	187	187	*	*	*	16	44	*	*	*	*	19	*
65-69	120	32	48	48	*	*	*	*	*	*	*	*	*	40	*
70 OR OVER	49	16	16	16	*	*	*	17	*	*	*	*	*	*	*
NO REPORT	16	*	*	*	*	*	*	*	*	*	*	*	*	16	*
MECHANICAL ENGINEERS															
TOTAL	5,577	2,645	2,139	2,136	3	*	*	263	322	*	*	2	*	206	*
UNDER 30	38	38	*	*	*	*	*	*	*	*	*	*	*	*	*
30-34	642	361	206	206	*	*	*	37	38	*	*	*	*	*	*
35-39	960	568	229	229	*	*	*	44	119	*	*	*	*	*	*
40-44	1,250	709	441	441	*	*	*	54	35	*	*	*	*	11	*
45-49	1,179	678	387	384	3	*	*	*	79	*	*	*	*	35	*
50-54	580	159	356	356	*	*	*	49	16	*	*	*	*	*	*
55-59	433	63	307	307	*	*	*	63	*	*	*	*	*	*	*
60-64	340	49	170	170	*	*	*	16	35	*	*	2	*	68	*
65-69	139	20	43	43	*	*	*	*	*	*	*	*	*	76	*
70 OR OVER	16	*	*	*	*	*	*	*	*	*	*	*	*	16	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS															
TOTAL	2,061	1,057	634	634	*	*	*	242	72	*	*	56	*	*	*
UNDER 30	8	*	8	8	*	*	*	*	*	*	*	*	*	*	*
30-34	326	101	86	86	*	*	*	82	1	*	*	56	*	*	*
35-39	541	376	119	119	*	*	*	46	*	*	*	*	*	*	*
40-44	423	228	119	119	*	*	*	76	*	*	*	*	*	*	*
45-49	204	148	34	34	*	*	*	*	22	*	*	*	*	*	*
50-54	194	63	109	109	*	*	*	*	22	*	*	*	*	*	*
55-59	164	57	56	56	*	*	*	38	13	*	*	*	*	*	*
60-64	188	84	90	90	*	*	*	*	14	*	*	*	*	*	*
65-69	13	*	13	13	*	*	*	*	*	*	*	*	*	*	*
70 OR OVER	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS															
TOTAL	5,366	2,993	992	992	*	*	*	525	702	89	24	*	24	17	*
UNDER 30	175	133	39	39	*	*	*	3	*	*	*	*	*	*	*
30-34	863	483	260	260	*	*	*	80	15	*	22	*	*	3	*
35-39	1,537	989	260	260	*	*	*	21	221	43	*	*	*	3	*
40-44	1,009	465	207	207	*	*	*	92	175	46	*	*	24	*	*
45-49	778	359	63	63	*	*	*	153	201	*	2	*	*	*	*
50-54	523	369	74	74	*	*	*	32	48	*	*	*	*	*	*
55-59	292	99	81	81	*	*	*	83	29	*	*	*	*	*	*
60-64	157	64	8	8	*	*	*	61	13	*	*	*	*	11	*
65-69	32	32	*	*	*	*	*	*	*	*	*	*	*	*	*
70 OR OVER	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE B-5. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AGE	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS					HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL										
OTHER ENGINEERS																
TOTAL	12,055	5,772	4,348	4,289	29	30	11	478	967	165	*	*	37	252	25
UNDER 30	115	115	*	*	*	*	*	*	*	*	*	*	*	*	*
30-34	1,315	694	413	413	*	*	*	116	*	14	*	*	2	76	*
35-39	2,244	1,200	746	746	*	*	4	79	190	23	*	*	*	2	*
40-44	2,948	1,629	941	926	15	*	*	79	173	99	*	*	*	2	25
45-49	1,696	888	613	611	2	*	*	46	120	29	*	*	*	*	*
50-54	1,556	475	761	749	12	*	7	35	221	*	*	*	35	22	*
55-59	1,216	397	568	568	*	*	*	73	162	*	*	*	*	16	*
60-64	473	245	84	84	*	*	*	32	72	*	*	*	*	40	*
65-69	340	99	198	168	*	30	*	*	13	*	*	*	*	30	*
70 OR OVER	152	30	24	24	*	*	*	18	16	*	*	*	*	64	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS																
TOTAL	93,848	13,473	56,787	55,528	1,127	132	2,974	3,165	7,590	764	1,265	378	152	7,133	167
UNDER 30	2,346	135	1,654	1,654	*	*	18	204	137	17	*	*	*	181	*
30-34	14,368	1,821	9,638	9,482	156	*	501	546	772	125	148	26	20	750	21
35-39	20,800	3,443	12,642	12,407	199	36	773	764	1,757	290	247	168	*	699	17
40-44	16,055	2,394	10,026	9,713	279	34	554	584	1,639	165	325	20	90	419	39
45-49	10,968	1,758	6,912	6,700	181	31	341	346	1,167	68	79	59	*	237	1
50-54	9,701	1,376	5,990	5,870	101	19	329	295	1,019	54	246	31	*	316	45
55-59	8,070	1,097	5,086	4,992	89	5	291	244	718	37	104	20	34	416	23
60-64	5,653	894	3,268	3,205	63	*	103	105	375	8	85	23	8	784	*
65-69	3,832	383	1,411	1,345	59	7	57	63	187	*	31	25	*	1,668	7
70 OR OVER	2,027	172	144	144	*	*	7	14	19	*	*	6	*	1,651	14
NO REPORT	28	*	16	16	*	*	*	*	*	*	*	*	*	12	*
BIOLOGICAL SCIENTISTS																
TOTAL	54,442	5,330	35,840	34,828	909	103	1,181	2,272	4,156	200	481	88	34	4,769	91
UNDER 30	1,456	70	1,090	1,090	*	*	*	150	77	7	*	*	*	62	*
30-34	9,066	810	6,474	6,389	85	*	270	358	509	43	63	9	*	516	14
35-39	12,507	1,426	8,564	8,367	161	36	218	560	1,104	52	41	39	*	503	*
40-44	9,124	881	6,066	5,813	241	12	288	472	836	51	179	17	*	315	19
45-49	5,995	621	4,300	4,110	159	31	139	216	489	33	40	*	*	156	1
50-54	5,291	536	3,523	3,419	85	19	117	219	522	14	90	5	*	227	38
55-59	4,459	424	3,053	2,969	79	5	84	154	344	*	58	*	34	296	12
60-64	2,933	334	1,773	1,721	52	*	48	73	160	*	10	11	*	526	*
63-69	2,285	166	883	836	47	*	17	56	108	*	*	7	*	1,048	*
70 OR OVER	1,302	62	100	100	*	*	*	14	7	*	*	*	*	1,112	7
NO REPORT	24	*	14	14	*	*	*	*	*	*	*	*	*	10	*
AGRICULTURAL SCIENTISTS																
TOTAL	17,270	3,450	9,147	8,974	151	22	3	284	2,435	9	393	39	84	1,391	35
UNDER 30	287	50	178	178	*	*	*	3	49	*	*	*	*	7	*
30-34	1,888	486	1,111	1,062	49	*	*	65	157	*	51	*	*	18	*
35-39	2,981	752	1,536	1,503	33	*	3	77	442	2	67	39	*	46	17
40-44	3,153	681	1,782	1,722	38	22	*	35	427	*	85	*	84	59	*
45-49	2,231	470	1,169	1,169	*	*	*	19	500	*	28	*	*	45	*
50-54	2,062	393	1,080	1,069	11	*	*	42	423	7	78	*	*	39	*
55-59	1,740	231	1,070	1,061	9	*	*	25	281	*	31	*	*	91	11
60-64	1,648	248	976	965	11	*	*	18	130	*	49	*	*	227	*
65-69	822	97	220	220	*	*	*	*	26	*	4	*	*	468	7
70 OR OVER	456	42	25	25	*	*	*	*	*	*	*	*	*	389	*
NO REPORT	2	*	*	*	*	*	*	*	*	*	*	*	*	2	*
MEDICAL SCIENTISTS																
TOTAL	22,136	4,693	11,800	11,726	67	7	1,790	609	999	555	391	251	34	973	41
UNDER 30	603	15	386	386	*	*	18	51	11	10	*	*	*	112	*
30-34	3,414	525	2,053	2,031	22	*	231	123	106	82	34	17	20	216	7
35-39	5,312	1,265	2,542	2,537	5	*	552	127	211	236	139	90	*	150	*
40-44	3,778	832	2,178	2,178	*	*	266	77	176	114	61	3	6	45	20
45-49	2,742	667	1,443	1,421	22	*	202	111	178	35	11	59	*	36	*
50-54	2,348	447	1,387	1,382	5	*	212	34	74	33	78	26	*	50	7
55-59	1,871	442	963	962	1	*	207	65	93	37	15	20	*	29	*
60-64	1,072	312	519	519	*	*	55	14	85	8	26	12	8	33	*
65-69	725	120	308	289	12	7	40	7	53	*	27	18	*	152	*
70 OR OVER	269	68	19	19	*	*	7	*	12	*	*	6	*	150	7
NO REPORT	2	*	2	2	*	*	*	*	*	*	*	*	*	*	*
PSYCHOLOGISTS																
TOTAL	45,416	10,145	21,833	19,195	987	1,651	6,194	1,693	1,211	221	982	733	5	2,352	47
UNDER 30	1,438	207	649	600	34	15	406	48	37	*	30	31	*	5	25
30-34	8,369	1,656	4,211	3,830	83	298	1,523	223	205	*	171	116	*	264	*
35-39	10,217	2,492	4,580	4,145	192	243	1,630	478	289	87	260	98	*	303	*
40-44	6,698	1,716	3,373	2,971	194	208	651	250	111	57	172	177	*	186	5
45-49	5,061	1,177	2,687	2,345	142	200	439	282	109	64	98	110	*	95	*
50-54	4,688	826	2,677	2,191	92	394	540	193	155	*	74	135	*	88	*
55-59	3,999	956	1,963	1,673	134	156	501	68	161	*	104	14	*	219	13
60-64	2,638	626	1,164	1,012	43	109	345	61	117	13	27	23	*	262	*
65-69	1,393	296	463	384	56	23	103	59	22	*	25	21	5	395	4
70 OR OVER	901	188	66	44	17	5	56	31	5	*	21	4	*	530	*
NO REPORT	14	5	*	*	*	*	*	*	*	*	*	4	*	5	*
SOCIAL SCIENTISTS																
TOTAL	56,473	4,721	39,252	37,513	1,245	494	138	2,152	3,862	232	1,202	477	645	3,527	265
UNDER 30	790	170	483	483	*	*	*	30	49	*	*	5	53	*	*
30-34	7,174	763	5,177	5,088	77	12	3	283	511	*	197	94	44	102	*
35-39	12,517	1,462	8,046	7,586	295	165	60	552	1,270	15	362	101	255	331	63
40-44	11,020	1,123	7,695	7,299	216	180	38	522	750	107	210	75	162	264	74
45-49	6,001	343	4,664	4,461	167	36	3	127	288	107	229	84	*	126	30
50-54	5,669	207	4,504	4,297	159	48	*	92	374	3	158	14	123	164	30
55-59	5,253	208	4,131	3,962	153	16	17	233	330	*	39	60	6	226	3
60-64	3,859	218	2,888	2,738	113	37	17	203	165	*	*	38	2	282	46
65-69	2,560	161	1,440	1,386	54	*	*	35	107	*	7	6	*	804	*
70 OR OVER	1,625	66	219	208	11	*	*	75	18	*	*	*	*	1,228	19
NO REPORT	5	*	5	5	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-5. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AGE	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
ECONOMISTS															
TOTAL	14,294	2,161	9,017	8,814	198	5	*	331	1,258	*	121	15	517	868	6
UNDER 30	449	129	215	215	*	*	*	3	49	*	*	*	53	*	*
30-34	2,231	308	1,633	1,573	60	*	*	34	196	*	13	*	44	3	*
35-39	2,935	659	1,592	1,572	20	*	*	101	387	*	7	*	174	15	*
40-44	2,536	468	1,412	1,398	9	5	*	57	319	*	51	*	147	79	3
45-49	1,008	81	848	848	*	*	*	6	59	*	*	*	*	14	*
50-54	1,560	103	1,140	1,112	28	*	*	37	133	*	28	*	97	22	*
55-59	1,339	144	1,053	1,010	43	*	*	35	36	*	22	15	*	31	3
60-64	877	117	645	645	*	*	*	10	18	*	*	*	2	85	*
65-69	866	110	413	375	38	*	*	2	61	*	*	*	*	280	*
70 OR OVER	490	42	63	63	*	*	*	46	*	*	*	*	*	339	*
NO REPORT	3	*	3	3	*	*	*	*	*	*	*	*	*	*	*
SOCIOLOGISTS/ANTHRO.															
TOTAL	11,909	487	9,285	8,957	298	30	96	534	301	9	203	18	15	911	50
UNDER 30	63	9	54	54	*	*	*	*	*	*	*	*	*	*	*
30-34	1,198	43	950	950	*	*	*	69	91	*	*	*	*	45	*
35-39	2,724	196	2,118	2,099	19	*	58	29	112	9	88	*	*	92	22
40-44	2,380	80	2,006	1,911	95	*	38	143	40	*	21	*	15	35	*
45-49	1,333	45	1,110	995	88	27	*	44	*	*	54	*	*	80	*
50-54	1,186	4	1,010	926	81	3	*	12	31	*	35	*	*	69	25
55-59	1,137	26	909	909	*	*	*	173	3	*	*	*	*	26	*
60-64	903	58	737	722	15	*	*	51	6	*	*	18	*	30	3
65-69	506	26	321	321	*	*	*	3	*	*	5	*	*	151	*
70 OR OVER	479	*	70	70	*	*	*	8	18	*	*	*	*	383	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER SOCIAL SCIENTISTS															
TOTAL	30,270	2,073	20,950	19,742	749	459	42	1,287	2,303	223	878	444	113	1,748	209
UNDER 30	278	32	214	214	*	*	*	27	*	*	*	5	*	*	*
30-34	3,745	412	2,594	2,565	17	12	3	180	224	*	184	94	*	54	*
35-39	6,858	607	4,336	3,915	256	165	2	422	771	6	267	101	81	224	41
40-44	6,104	575	4,277	3,990	112	175	*	320	391	107	139	75	*	150	71
45-49	3,660	217	2,706	2,618	79	9	3	77	229	107	175	84	*	32	30
50-54	2,923	100	2,354	2,259	50	45	*	43	210	3	95	14	26	73	5
55-59	2,777	38	2,169	2,043	110	16	17	25	291	*	17	45	6	169	*
60-64	2,079	43	1,506	1,371	98	37	17	142	141	*	*	20	*	167	43
65-69	1,188	25	706	690	16	*	*	30	46	*	2	6	*	373	*
70 OR OVER	656	24	86	75	11	*	*	21	*	*	*	*	*	506	19
NO REPORT	2	*	2	2	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-6. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND TYPE OF EMPLOYER: 1981

FIELD AND RACE	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
ALL FIELDS															
TOTAL	363,866	99,020	186,809	179,010	5,035	2,764	9,862	12,581	25,087	2,052	4,454	2,068	992	20,328	613
WHITE	322,853	84,682	167,147	160,067	4,497	2,583	8,986	11,390	22,956	1,885	4,164	1,844	844	18,455	500
BLACK	4,609	613	2,892	2,767	69	56	153	187	259	55	35	55	29	289	42
AM. INDIAN/ALSKN NATIVE	2,325	586	1,204	1,197	7	*	106	63	176	23	11	17	5	127	7
ASIAN/PACIFIC ISLANDER	27,857	11,763	12,030	11,652	345	33	464	773	1,314	60	200	120	114	980	39
NO REPORT	6,222	1,376	3,536	3,327	117	92	153	168	382	29	44	32	*	477	25
PHYSICAL SCIENTISTS															
TOTAL	67,693	27,401	28,333	26,897	1,162	274	518	2,071	4,343	136	258	100	*	4,504	29
WHITE	59,740	23,939	25,100	23,823	1,005	272	465	1,829	3,766	116	212	87	*	4,221	25
BLACK	644	208	347	340	7	*	*	19	35	5	*	*	*	29	1
AM. INDIAN/ALSKN NATIVE	296	65	173	173	*	*	*	13	45	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	5,838	2,847	2,101	1,993	106	2	71	153	438	*	44	13	*	138	3
NO REPORT	1,175	342	612	568	44	*	2	27	59	15	2	*	*	116	*
CHEMISTS															
TOTAL	45,376	22,250	15,772	14,621	923	228	405	1,033	2,131	65	203	100	*	3,405	12
WHITE	40,150	19,455	14,195	13,159	810	226	332	912	1,748	48	157	87	*	3,208	8
BLACK	380	126	204	197	7	*	*	13	29	2	*	*	*	5	1
AM. INDIAN/ALSKN NATIVE	201	63	112	112	*	*	*	*	26	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	3,898	2,328	968	904	62	2	71	103	291	*	44	13	*	77	3
NO REPORT	747	278	293	249	44	*	2	5	37	15	2	*	*	115	*
PHYSICISTS/ASTRONOMERS															
TOTAL	22,317	5,151	12,561	12,276	239	46	113	1,038	2,212	71	55	*	*	1,099	17
WHITE	19,590	4,484	10,905	10,664	195	46	113	917	2,018	68	55	*	*	1,013	17
BLACK	264	82	143	143	*	*	*	6	6	3	*	*	*	24	*
AM. INDIAN/ALSKN NATIVE	95	2	61	61	*	*	*	13	19	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,940	519	1,133	1,089	44	*	*	80	147	*	*	*	*	61	*
NO REPORT	428	64	319	319	*	*	*	22	22	*	*	*	*	1	*
MATHEMATICAL SCIENTISTS															
TOTAL	16,470	1,621	12,739	12,294	302	143	*	263	852	57	2	*	14	876	46
WHITE	14,486	1,482	11,150	10,782	227	141	*	230	737	43	2	*	*	796	46
BLACK	200	6	147	145	2	*	*	2	9	14	*	*	14	8	*
AM. INDIAN/ALSKN NATIVE	74	*	55	55	*	*	*	2	17	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,221	118	998	947	51	*	*	28	39	*	*	*	*	38	*
NO REPORT	489	15	389	365	22	2	*	1	50	*	*	*	*	34	*
MATHEMATICIANS															
TOTAL	13,819	1,159	11,007	10,564	300	143	*	224	553	57	2	*	*	781	36
WHITE	12,258	1,079	9,675	9,309	225	141	*	191	524	43	2	*	*	708	36
BLACK	177	6	140	138	2	*	*	2	7	14	*	*	*	8	*
AM. INDIAN/ALSKN NATIVE	54	*	37	37	*	*	*	2	15	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	937	59	812	761	51	*	*	28	7	*	*	*	*	31	*
NO REPORT	393	15	343	319	22	2	*	1	*	*	*	*	*	34	*
STATISTICIANS															
TOTAL	2,651	462	1,732	1,730	2	*	*	39	299	*	*	*	14	95	10
WHITE	2,228	403	1,475	1,473	2	*	*	39	213	*	*	*	*	88	10
BLACK	23	*	7	7	*	*	*	*	2	*	*	*	14	*	*
AM. INDIAN/ALSKN NATIVE	20	*	18	18	*	*	*	*	2	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	284	59	186	186	*	*	*	*	32	*	*	*	*	7	*
NO REPORT	96	*	46	46	*	*	*	*	50	*	*	*	*	*	*
COMPUTER SPECIALISTS															
TOTAL	9,066	5,212	3,010	2,954	49	7	20	276	355	23	48	104	*	18	*
WHITE	7,942	4,461	2,725	2,669	49	7	20	261	285	20	48	104	*	18	*
BLACK	20	14	3	3	*	*	*	*	3	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	17	5	9	9	*	*	*	*	3	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	886	603	250	250	*	*	*	2	28	3	*	*	*	*	*
NO REPORT	201	129	23	23	*	*	*	13	36	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS															
TOTAL	16,589	4,788	6,772	6,611	128	33	*	623	3,069	115	562	54	16	560	30
WHITE	15,547	4,479	6,327	6,166	128	33	*	531	2,940	88	543	54	16	539	30
BLACK	41	8	17	17	*	*	*	2	14	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	56	7	14	14	*	*	*	*	33	*	2	*	*	*	*
ASIAN/PACIFIC ISLANDER	769	247	310	310	*	*	*	90	61	15	8	*	*	18	*
NO REPORT	196	47	104	104	*	*	*	*	21	12	9	*	*	3	*
EARTH SCIENTISTS															
TOTAL	12,605	4,213	5,019	4,858	128	33	*	309	2,060	23	412	54	7	484	24
WHITE	11,845	3,982	4,709	4,548	128	33	*	219	1,969	23	395	54	7	463	24
BLACK	32	8	13	13	*	*	*	2	9	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	47	7	7	7	*	*	*	*	31	*	2	*	*	*	*
ASIAN/PACIFIC ISLANDER	535	169	209	209	*	*	*	88	43	*	8	*	*	18	*
NO REPORT	146	47	81	81	*	*	*	*	8	*	7	*	*	3	*
OCEANOGRAPHERS															
TOTAL	1,818	184	964	964	*	*	*	86	367	29	137	*	9	36	6
WHITE	1,701	159	900	900	*	*	*	84	356	14	137	*	9	36	6
BLACK	7	*	2	2	*	*	*	*	5	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	7	*	7	7	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	102	25	55	55	*	*	*	2	5	15	*	*	*	*	*
NO REPORT	1	*	*	*	*	*	*	*	1	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS															
TOTAL	2,166	391	789	789	*	*	*	228	642	63	13	*	*	40	*
WHITE	2,001	338	718	718	*	*	*	228	615	51	11	*	*	40	*
BLACK	2	*	2	2	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	2	*	*	*	*	*	*	*	2	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	112	53	46	46	*	*	*	*	13	*	*	*	*	*	*
NO REPORT	49	*	23	23	*	*	*	*	12	12	2	*	*	*	*
ENGINEERS															
TOTAL	58,311	31,459	18,083	18,018	35	30	18	2,338	3,805	504	135	222	160	1,358	29
WHITE	47,678	24,498	15,707	15,648	29	30	14	2,068	3,384	488	109	148	136	1,126	*
BLACK	270	118	92	92	*	*	*	15	16	*	*	*	*	*	29
AM. INDIAN/ALSKN NATIVE	437	230	119	116	3	*	*	13	7	16	*	8	*	44	*
ASIAN/PACIFIC ISLANDER	9,055	6,421	1,769	1,766	3	*	4	242	331	*	26	66	24	172	*
NO REPORT	871	392	396	396	*	*	*	*	67	*	*	*	*	16	*

* NO CASES REPORTED

TABLE B-6. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND RACE	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
AERO/ASTRO ENGINEERS															
TOTAL	2,536	1,126	675	675	*	*	*	176	425	116	*	*	*	18	*
WHITE	2,250	933	612	612	*	*	*	168	403	116	*	*	*	18	*
BLACK	10	*	2	2	*	*	*	*	8	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	260	193	53	53	*	*	*	8	6	*	*	*	*	*	*
NO REPORT	16	*	8	8	*	*	*	*	8	*	*	*	*	*	*
CHEMICAL ENGINEERS															
TOTAL	7,612	5,342	1,380	1,380	*	*	*	143	258	*	23	*	*	466	*
WHITE	5,895	4,087	1,096	1,096	*	*	*	132	158	*	23	*	*	399	*
BLACK	37	33	*	*	*	*	*	4	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	5	2	3	3	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	1,621	1,203	268	268	*	*	*	7	76	*	*	*	*	67	*
NO REPORT	54	17	13	13	*	*	*	*	24	*	*	*	*	*	*
CIVIL ENGINEERS															
TOTAL	6,032	2,468	2,789	2,786	3	*	7	69	147	131	88	104	99	126	4
WHITE	4,788	1,546	2,545	2,545	*	*	7	69	117	131	62	86	99	126	*
BLACK	24	4	8	8	*	*	*	*	8	*	*	*	*	*	4
AM. INDIAN/ALSKN NATIVE	11	*	3	*	3	*	*	*	*	*	*	8	*	*	*
ASIAN/PACIFIC ISLANDER.	1,163	918	187	187	*	*	*	*	22	*	26	10	*	*	*
NO REPORT	46	*	46	46	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS															
TOTAL	10,834	6,189	3,630	3,630	*	*	*	264	524	3	*	60	*	164	*
WHITE	8,952	5,072	3,050	3,050	*	*	*	214	417	3	*	60	*	136	*
BLACK	43	5	35	35	*	*	*	3	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	131	94	24	24	*	*	*	10	3	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	1,578	985	424	424	*	*	*	37	104	*	*	*	*	28	*
NO REPORT	130	33	97	97	*	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS															
TOTAL	6,238	4,067	1,496	1,496	*	*	*	178	388	*	*	*	*	109	*
WHITE	5,234	3,263	1,312	1,312	*	*	*	178	388	*	*	*	*	93	*
BLACK	5	5	*	*	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	14	7	7	7	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	818	698	120	120	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	167	94	57	57	*	*	*	*	*	*	*	*	*	16	*
MECHANICAL ENGINEERS															
TOTAL	5,577	2,645	2,139	2,136	3	*	*	263	322	*	*	2	*	206	*
WHITE	4,307	1,895	1,773	1,773	*	*	*	163	312	*	*	2	*	162	*
BLACK	10	3	7	7	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	64	*	20	20	*	*	*	*	*	*	*	*	*	44	*
ASIAN/PACIFIC ISLANDER.	1,045	657	278	275	3	*	*	100	10	*	*	*	*	*	*
NO REPORT	151	90	61	61	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS															
TOTAL	2,061	1,057	634	634	*	*	*	242	72	*	*	56	*	*	*
WHITE	1,602	756	540	540	*	*	*	234	72	*	*	*	*	*	*
BLACK	3	3	*	*	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	376	254	58	58	*	*	*	8	*	*	*	56	*	*	*
NO REPORT	80	44	36	36	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS															
TOTAL	5,366	2,993	992	992	*	*	*	525	702	89	24	*	24	17	*
WHITE	4,736	2,506	973	973	*	*	*	520	624	75	24	*	*	14	*
BLACK	6	*	4	4	*	*	*	2	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	93	73	3	3	*	*	*	3	*	14	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	465	348	12	12	*	*	*	*	78	*	*	*	24	3	*
NO REPORT	66	66	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS															
TOTAL	12,055	5,772	4,348	4,289	29	30	11	478	967	165	*	*	37	252	25
WHITE	9,914	4,440	3,806	3,747	29	30	7	390	893	163	*	*	37	178	*
BLACK	132	65	36	36	*	*	*	6	*	*	*	*	*	*	25
AM. INDIAN/ALSKN NATIVE	119	54	59	59	*	*	*	*	4	2	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	1,729	1,165	369	369	*	*	4	82	35	*	*	*	*	74	*
NO REPORT	161	48	78	78	*	*	*	*	35	*	*	*	*	*	*
LIFE SCIENTISTS															
TOTAL	93,848	13,473	56,787	55,528	1,127	132	2,974	3,165	7,590	764	1,265	378	152	7,133	167
WHITE	84,329	12,031	50,844	49,699	1,047	98	2,523	2,846	7,088	688	1,200	367	152	6,473	117
BLACK	1,185	65	783	764	14	5	41	42	105	31	10	5	*	96	7
AM. INDIAN/ALSKN NATIVE	551	119	318	314	4	*	7	24	42	7	2	*	*	25	7
ASIAN/PACIFIC ISLANDER.	6,416	1,094	4,070	3,991	57	22	332	170	284	38	53	*	*	339	36
NO REPORT	1,367	164	772	760	5	7	71	83	71	*	*	6	*	200	*
BIOLOGICAL SCIENTISTS															
TOTAL	54,442	5,330	35,840	34,828	909	103	1,181	2,272	4,156	200	481	88	34	4,769	91
WHITE	48,663	4,620	31,975	31,044	840	91	1,032	2,007	3,837	173	456	87	34	4,366	76
BLACK	663	32	429	412	12	5	26	24	78	14	*	1	*	52	7
AM. INDIAN/ALSKN NATIVE	335	70	187	183	4	*	4	17	19	7	*	*	*	26	7
ASIAN/PACIFIC ISLANDER.	4,025	592	2,715	2,667	48	*	119	146	221	6	25	*	*	200	1
NO REPORT	756	16	534	522	5	7	*	78	1	*	*	*	*	127	*
AGRICULTURAL SCIENTISTS															
TOTAL	17,270	3,450	9,147	8,974	151	22	3	284	2,435	9	393	39	84	1,391	35
WHITE	15,998	3,215	8,396	8,254	142	*	*	262	2,371	9	386	39	84	1,218	18
BLACK	209	8	134	134	*	*	*	15	10	*	*	*	*	42	*
AM. INDIAN/ALSKN NATIVE	113	15	65	65	*	*	3	7	23	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	771	205	451	420	9	22	*	*	19	*	7	*	*	72	17
NO REPORT	179	7	101	101	*	*	*	*	12	*	*	*	*	59	*
MEDICAL SCIENTISTS															
TOTAL	22,136	4,693	11,800	11,726	67	7	1,790	609	999	555	391	251	34	973	41
WHITE	19,668	4,196	10,473	10,401	65	7	1,491	577	880	506	358	241	34	889	23
BLACK	313	25	220	218	2	*	15	3	17	17	10	4	*	2	*
AM. INDIAN/ALSKN NATIVE	103	34	66	66	*	*	*	*	*	*	2	*	*	1	*
ASIAN/PACIFIC ISLANDER.	1,620	297	904	906	*	*	213	24	44	32	21	*	*	67	18
NO REPORT	432	141	137	137	*	*	71	5	58	*	*	6	*	14	*

* NO CASES REPORTED

TABLE B-6. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND RACE	TOTAL	BUS-INESS/INDUS-TRY	EDUCATIONAL INSTITUTIONS				HOS-PITAL/CLINIC	NON-PROFIT ORGS	FED-ERAL GOV'T	MILI-TARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EM-PLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
PSYCHOLOGISTS															
TOTAL	45,416	10,145	21,833	19,195	987	1,651	6,194	1,693	1,211	221	982	733	5	2,352	47
WHITE	42,666	9,621	20,342	17,894	876	1,572	5,849	1,640	1,122	210	933	678	5	2,244	22
BLACK	853	112	523	447	31	45	109	18	26	5	15	8	*	37	*
AM. INDIAN/ALSKN NATIVE	475	154	179	179	*	*	99	6	29	*	4	4	*	*	*
ASIAN/PACIFIC ISLANDER.	609	88	334	283	42	9	57	17	32	4	30	17	*	30	*
NO REPORT	813	170	455	392	38	25	80	12	2	2	*	26	*	41	25
SOCIAL SCIENTISTS															
TOTAL	56,473	4,721	39,252	37,513	1,245	494	138	2,152	3,862	232	1,202	477	665	3,527	265
WHITE	50,465	4,171	34,952	32,386	1,136	430	135	1,985	3,634	232	1,117	406	535	3,038	260
BLACK	1,396	82	980	959	15	6	3	89	51	*	10	42	15	119	5
AM. INDIAN/ALSKN NATIVE	419	6	337	337	*	*	*	5	*	*	3	5	5	58	*
ASIAN/PACIFIC ISLANDER.	3,083	345	2,198	2,112	86	*	*	41	101	*	39	24	90	245	*
NO REPORT	1,110	117	785	719	8	58	*	32	76	*	33	*	*	67	*
ECONOMISTS															
TOTAL	14,294	2,161	9,017	8,814	198	5	*	331	1,258	*	121	15	517	868	6
WHITE	12,576	1,893	7,894	7,691	198	5	*	319	1,202	*	101	*	422	737	6
BLACK	234	39	145	145	*	*	*	10	10	*	*	*	*	30	*
AM. INDIAN/ALSKN NATIVE	242	*	219	219	*	*	*	*	*	*	*	*	5	18	*
ASIAN/PACIFIC ISLANDER.	1,165	229	698	698	*	*	*	2	46	*	20	15	90	65	*
NO REPORT	79	*	61	61	*	*	*	*	*	*	*	*	*	18	*
SOCIOLOGISTS/ANTHRO.															
TOTAL	11,909	487	9,285	8,957	298	30	96	534	301	9	203	18	15	911	50
WHITE	10,804	437	8,462	8,151	281	30	96	473	293	9	190	18	*	776	50
BLACK	343	7	246	246	*	*	*	35	2	*	*	*	15	38	*
AM. INDIAN/ALSKN NATIVE	65	1	64	64	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	427	11	319	307	12	*	*	*	6	*	13	*	*	78	*
NO REPORT	270	31	194	189	5	*	*	26	*	*	*	*	*	19	*
OTHER SOCIAL SCIENTISTS															
TOTAL	30,270	2,073	20,950	19,742	749	459	42	1,287	2,303	223	878	444	113	1,748	209
WHITE	27,087	1,841	18,596	17,544	657	395	39	1,193	2,139	223	826	388	113	1,525	204
BLACK	819	36	589	568	15	6	3	44	39	*	10	42	*	51	5
AM. INDIAN/ALSKN NATIVE	112	5	54	54	*	*	*	5	*	*	3	5	*	40	*
ASIAN/PACIFIC ISLANDER.	1,491	105	1,181	1,107	74	*	*	39	49	*	6	9	*	102	*
NO REPORT	761	86	530	469	3	58	*	6	76	*	33	*	*	30	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 8-7. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1981

FIELD AND AGE	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
ALL FIELDS														
TOTAL	363,866	120,108	55,265	46,475	18,368	60,312	32,649	27,663	104,956	12,035	25,724	16,441	20,328	3,962
UNDER 30	8,591	5,366	3,349	1,644	373	369	189	180	1,450	183	760	180	236	47
30-34	52,793	26,211	13,260	9,376	3,575	3,853	2,333	1,520	12,793	1,444	4,134	2,421	1,518	419
35-39	78,623	30,016	13,750	11,322	4,944	12,367	7,628	4,739	20,617	2,637	6,685	3,952	1,722	627
40-44	68,616	22,729	9,604	9,051	4,074	13,126	7,444	5,682	20,784	2,439	4,431	3,201	1,100	806
45-49	44,839	12,632	5,161	4,957	2,514	9,941	5,024	4,917	14,666	1,404	2,872	2,001	833	510
50-54	37,431	10,027	4,233	4,449	1,345	8,743	4,122	4,621	12,542	960	2,155	1,659	964	401
55-59	31,211	7,321	3,265	3,176	880	6,536	3,430	3,106	10,997	866	2,435	1,297	1,299	460
60-64	21,258	4,051	1,707	1,933	411	3,797	1,864	1,933	7,374	845	1,433	925	2,447	386
65-69	13,521	1,579	834	524	221	1,373	546	827	3,189	781	578	675	5,160	186
70 OR OVER	6,914	176	102	43	31	201	67	134	542	496	236	130	5,013	120
NO REPORT	69	*	*	*	*	6	2	4	22	*	5	*	36	*
PHYSICAL SCIENTISTS														
TOTAL	67,693	29,681	13,876	12,725	3,080	11,892	8,710	3,182	15,609	1,128	1,446	2,865	4,506	568
UNDER 30	2,148	1,915	1,248	496	171	73	64	9	66	23	*	35	36	*
30-34	9,031	6,581	3,323	2,711	547	496	448	48	1,136	2	172	348	237	59
35-39	12,803	6,500	2,957	2,883	660	2,339	1,815	524	2,776	85	386	424	232	61
40-44	12,866	5,469	2,535	2,339	595	2,572	1,872	700	3,524	162	279	577	122	161
45-49	8,357	2,992	1,180	1,272	540	1,959	1,259	700	2,417	67	272	361	239	70
50-54	7,447	2,749	1,070	1,379	300	1,590	1,190	400	2,147	77	102	387	321	74
55-59	5,947	1,941	898	878	165	1,508	1,181	327	1,455	163	153	367	296	64
60-64	4,584	1,189	484	642	63	887	626	261	1,310	234	62	192	636	74
65-69	3,211	331	176	118	37	428	218	210	612	255	*	190	1,394	1
70 OR OVER	1,295	14	5	7	2	40	37	3	164	60	20	4	989	4
NO REPORT	4	*	*	*	*	*	*	*	2	*	*	*	2	*
CHEMISTS														
TOTAL	45,376	18,548	8,087	8,376	2,085	8,985	6,855	2,130	9,661	876	1,181	2,329	3,405	391
UNDER 30	1,629	1,406	906	344	156	73	64	9	62	23	*	29	36	*
30-34	5,992	4,294	2,072	1,909	313	422	376	46	765	2	91	272	137	29
35-39	8,108	3,670	1,488	1,774	408	1,613	1,323	290	1,928	40	317	328	172	40
40-44	8,177	3,040	1,408	1,362	270	1,949	1,485	464	2,237	112	256	415	62	106
45-49	5,616	2,004	616	947	441	1,458	1,027	431	1,424	43	206	286	149	46
50-54	5,120	1,767	601	880	286	1,255	956	299	1,264	72	100	360	258	44
55-59	3,823	1,247	525	586	136	1,120	919	201	670	121	129	280	206	50
60-64	3,371	865	324	491	50	727	508	219	799	190	62	165	491	72
65-69	2,486	241	142	76	23	328	160	168	407	226	*	190	1,094	*
70 OR OVER	1,050	14	5	7	2	40	37	3	123	47	20	4	798	4
NO REPORT	4	*	*	*	*	*	*	*	2	*	*	*	2	*
PHYSICISTS/ASTRONOMERS														
TOTAL	22,317	11,133	5,789	4,349	995	2,907	1,855	1,052	5,948	252	265	536	1,099	177
UNDER 30	519	509	342	152	15	*	*	*	4	*	*	6	*	*
30-34	3,039	2,287	1,251	802	234	74	72	2	391	*	81	76	100	30
35-39	4,695	2,830	1,469	1,109	252	726	492	234	848	45	69	96	60	21
40-44	4,689	2,429	1,127	977	325	623	387	236	1,287	50	23	162	60	55
45-49	2,741	988	564	325	99	501	232	269	993	24	66	55	90	24
50-54	2,327	982	469	499	14	335	234	101	883	5	2	27	63	30
55-59	2,124	694	373	292	29	388	262	126	785	42	24	87	90	14
60-64	1,213	324	160	151	13	160	118	42	511	44	*	27	145	2
65-69	725	90	34	42	14	100	58	42	205	29	*	*	300	1
70 OR OVER	245	*	*	*	*	*	*	*	41	13	*	*	191	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MATHEMATICAL SCIENTISTS														
TOTAL	16,470	3,390	1,756	1,239	395	1,316	284	1,032	9,602	458	301	383	876	144
UNDER 30	452	193	134	44	15	*	*	*	224	21	*	*	14	*
30-34	2,063	619	451	116	52	7	5	2	1,159	112	23	100	14	29
35-39	3,795	948	426	366	156	202	57	145	2,117	181	73	120	134	20
40-44	3,686	664	236	363	65	415	51	364	2,284	35	98	85	49	56
45-49	2,163	338	159	165	14	234	26	208	1,407	58	60	30	25	11
50-54	1,554	251	143	50	58	231	74	157	998	12	15	25	22	*
55-59	1,070	170	97	46	27	131	49	82	663	16	22	9	29	10
60-64	732	152	81	71	*	63	14	49	447	16	8	2	44	*
65-69	651	55	29	18	8	25	8	17	253	7	*	12	291	8
70 OR OVER	302	*	*	*	*	8	*	8	29	*	2	*	253	10
NO REPORT	2	*	*	*	*	*	*	*	1	*	*	*	1	*
MATHEMATICIANS														
TOTAL	13,819	2,731	1,631	761	339	1,147	213	934	8,277	161	223	378	781	121
UNDER 30	379	161	134	12	15	*	*	*	191	13	*	*	14	*
30-34	1,727	573	414	107	52	7	5	2	936	53	20	100	9	29
35-39	3,135	679	397	160	122	179	36	143	1,918	39	53	120	129	18
40-44	3,150	521	223	247	51	358	49	309	2,009	17	55	85	49	56
45-49	1,773	270	155	101	14	218	26	192	1,171	3	60	25	20	6
50-54	1,308	229	133	38	58	178	46	132	829	12	15	25	20	*
55-59	931	152	93	32	27	111	29	82	602	16	10	9	29	2
60-64	590	122	66	56	*	63	14	49	364	8	8	2	23	*
65-69	560	24	16	8	*	25	8	17	227	*	*	12	264	8
70 OR OVER	264	*	*	*	*	8	*	8	29	*	2	*	223	2
NO REPORT	2	*	*	*	*	*	*	*	1	*	*	*	1	*
STATISTICIANS														
TOTAL	2,651	659	125	478	56	169	71	98	1,325	297	78	5	95	23
UNDER 30	73	32	*	32	*	*	*	*	33	8	*	*	*	*
30-34	336	46	37	9	*	*	*	*	223	59	3	*	5	*
35-39	660	269	29	206	34	23	21	2	199	142	20	*	5	2
40-44	536	143	13	116	14	57	2	55	275	18	43	*	*	*
45-49	390	68	4	64	*	16	*	16	236	35	*	5	5	5
50-54	246	22	10	12	*	53	28	25	169	*	*	*	2	*
55-59	139	18	4	14	*	20	20	*	81	*	12	*	*	8
60-64	142	30	15	15	*	*	*	*	83	8	*	*	21	*
65-69	91	31	13	10	8	*	*	*	26	7	*	*	27	*
70 OR OVER	38	*	*	*	*	*	*	*	*	*	*	*	30	8
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE B-7. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1981
CONTINUED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN					SALES/			
FIELD AND AGE	TOTAL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
COMPUTER SPECIALISTS														
TOTAL	9,066	4,512	620	884	3,008	1,693	808	885	1,546	554	217	424	18	102
UNDER 30	165	125	26	36	63	1	1	*	39	*	*	3	*	*
30-34	1,719	1,048	202	203	643	142	51	91	320	95	21	78	15	*
35-39	2,977	1,733	204	390	1,139	556	250	306	263	133	120	169	3	*
40-44	1,924	763	58	104	601	415	222	193	505	177	16	44	*	4
45-49	1,028	375	60	59	256	305	170	135	96	79	10	65	*	98
50-54	509	213	70	21	122	127	63	64	79	39	12	39	*	*
55-59	466	120	*	29	91	93	38	55	201	15	36	1	*	*
60-64	182	104	*	42	62	28	13	15	27	16	2	5	*	*
65-69	65	23	*	*	23	8	*	8	16	*	*	18	*	*
70 OR OVER	28	8	*	*	8	18	*	18	*	*	*	2	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS														
TOTAL	16,589	6,321	3,306	2,729	286	3,624	2,410	1,214	3,617	1,045	395	882	560	145
UNDER 30	313	211	171	40	*	13	13	*	80	7	*	2	*	*
30-34	2,460	1,292	765	454	73	296	179	117	402	170	57	183	57	3
35-39	3,506	1,632	787	772	73	878	684	194	594	207	9	153	13	20
40-44	3,315	1,370	604	686	80	719	526	193	786	222	63	112	34	9
45-49	2,388	638	361	268	9	606	405	201	669	169	43	142	74	47
50-54	1,599	459	193	231	35	557	305	252	401	43	42	66	31	*
55-59	1,309	445	272	157	16	290	175	115	317	35	147	54	15	6
60-64	847	179	85	94	*	203	117	86	239	52	27	87	52	8
65-69	520	75	54	21	*	62	6	56	100	73	7	61	129	13
70 OR OVER	332	20	14	6	*	*	*	*	29	67	*	22	155	39
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
EARTH SCIENTISTS														
TOTAL	12,605	4,076	1,755	2,067	254	2,719	1,680	1,039	3,101	927	373	805	484	120
UNDER 30	176	134	94	40	*	13	13	*	20	7	*	2	*	*
30-34	1,676	788	391	354	43	179	129	50	299	137	56	166	48	3
35-39	2,312	797	277	447	73	687	501	186	480	201	9	123	6	9
40-44	2,607	978	335	565	78	581	396	185	690	176	54	99	20	9
45-49	1,985	467	228	230	9	423	242	181	644	164	43	132	65	47
50-54	1,370	377	143	199	35	451	220	231	373	43	30	65	31	*
55-59	1,035	308	174	118	16	190	84	106	287	28	147	54	15	6
60-64	685	151	64	87	*	145	95	50	185	45	27	81	43	8
65-69	441	56	35	21	*	50	*	50	94	59	7	61	108	6
70 OR OVER	318	20	14	6	*	*	*	*	29	67	*	22	148	32
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OCEANOGRAPHERS														
TOTAL	1,818	1,028	792	224	12	445	345	100	182	53	20	36	36	18
UNDER 30	4	4	4	*	*	*	*	*	*	*	*	*	*	*
30-34	442	278	233	33	12	114	47	67	13	27	1	*	9	*
35-39	592	388	242	146	*	104	96	8	67	*	*	21	1	11
40-44	289	159	151	8	*	80	73	7	41	*	7	*	2	*
45-49	214	118	104	14	*	64	55	9	10	5	*	8	9	*
50-54	96	31	15	16	*	24	24	*	28	*	12	1	*	*
55-59	84	37	30	7	*	31	22	9	9	7	*	*	*	*
60-64	49	7	7	*	*	22	22	*	14	*	*	6	*	*
65-69	34	6	6	*	*	6	6	*	*	14	*	*	8	*
70 OR OVER	14	*	*	*	*	*	*	*	*	*	*	*	7	7
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS														
TOTAL	2,166	1,217	759	438	20	460	385	75	334	65	2	41	40	7
UNDER 30	133	73	73	*	*	*	*	*	60	*	*	*	*	*
30-34	342	226	141	67	18	3	3	*	90	6	*	17	*	*
35-39	602	447	268	179	*	87	87	*	47	6	*	9	6	*
40-44	419	233	118	113	2	58	57	1	55	46	2	13	12	*
45-49	189	53	29	24	*	119	108	11	15	*	*	2	*	*
50-54	133	51	35	16	*	82	61	21	*	*	*	*	*	*
55-59	190	100	68	32	*	69	69	*	21	*	*	*	*	*
60-64	113	21	14	7	*	36	*	36	40	7	*	*	9	*
65-69	45	13	13	*	*	6	*	6	6	*	*	*	13	7
70 OR OVER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENGINEERS														
TOTAL	58,311	23,380	2,777	10,730	9,873	15,193	10,302	4,891	10,744	3,818	1,366	2,282	1,358	170
UNDER 30	936	711	95	509	107	3	3	*	195	3	*	24	*	*
30-34	7,609	4,793	580	2,297	1,916	971	853	118	1,132	297	194	132	79	11
35-39	12,008	5,463	557	2,527	2,379	3,047	2,469	578	1,642	1,000	324	460	7	65
40-44	13,052	5,291	542	2,307	2,442	3,985	2,692	1,293	1,826	1,045	292	562	26	25
45-49	8,873	3,217	493	1,295	1,429	2,517	1,596	921	1,901	590	215	393	37	3
50-54	6,264	1,767	232	767	768	2,366	1,251	1,115	1,494	223	74	302	22	16
55-59	5,097	1,294	178	669	447	1,486	931	555	1,565	231	215	190	98	18
60-64	2,763	602	71	263	268	676	381	295	688	190	23	197	387	*
65-69	1,289	328	29	96	103	124	108	16	261	130	29	6	479	32
70 OR OVER	404	14	*	*	14	18	18	*	40	109	*	16	207	*
NO REPORT	16	*	*	*	*	*	*	*	*	*	*	*	16	*
AERO/ASTRO ENGINEERS														
TOTAL	2,536	1,076	175	588	313	838	620	218	387	40	94	50	18	43
UNDER 30	42	*	*	*	*	*	*	*	42	*	*	*	*	*
30-34	268	240	50	172	18	26	26	*	*	*	*	2	*	*
35-39	479	158	*	97	61	131	71	60	48	23	46	30	*	43
40-44	802	375	90	139	146	339	249	90	88	*	*	*	*	*
45-49	288	85	35	26	24	133	133	*	68	*	2	*	*	*
50-54	193	51	*	51	*	89	72	17	17	*	36	*	*	*
55-59	333	123	*	75	48	112	61	51	96	*	*	*	2	*
60-64	107	44	*	28	16	*	*	*	28	17	*	18	*	*
65-69	24	*	*	*	*	8	*	*	*	*	*	*	16	*
70 OR OVER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE B-7. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1981
CONTINUED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN								
FIELD AND AGE	TOTAL	TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER	TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
CHEMICAL ENGINEERS														
TOTAL......................	7,612	3,605	278	1,847	1,480	1,624	1,192	432	963	387	212	355	466	*
UNDER 30..............	396	279	44	235	*	*	*	*	114	3	*	*	*	*
30-34..................	1,167	939	74	429	436	143	143	*	43	*	16	28	*	*
35-39..................	1,426	725	23	408	294	400	354	46	118	44	67	70	2	*
40-44..................	1,120	510	*	356	154	298	255	43	90	109		68	1	*
45-49..................	1,398	570	103	120	347	277	129	148	343	151		16	2	*
50-54..................	743	317	*	218	99	268	169	99	54	16		72	*	*
55-59..................	594	159	34	32	93	190	110	80	101	32		48	32	*
60-64..................	500	90	*	49	41	48	32	16	100	16	*	53	193	*
65-69..................	236	16	*	*	16	*	*	*	*	16	*	*	204	*
70 OR OVER............	32	*	*	*	*	*	*	*	*	*	*	*	32	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS														
TOTAL......................	6,032	1,220	134	572	514	1,167	443	724	2,066	983	185	262	126	23
UNDER 30..............	2	2	*	2	*	*	*	*	*	*	*	*	*	*
30-34..................	651	193	82	47	64	99	99	*	231	127	*	1	*	*
35-39..................	1,167	412	9	256	147	101	78	23	248	341	2	63	*	*
40-44..................	1,863	304	*	162	142	411	143	268	578	396	89	85	*	*
45-49..................	759	70	*	27	43	170	44	126	354	27	81	54	*	3
50-54..................	718	164	7	60	97	210	9	201	294	46	*	*	*	4
55-59..................	406	46	36	3	7	107	70	37	233	13	*	7	*	*
60-64..................	241	*	*	*	*	69	*	69	64	16	*	52	40	*
65-69..................	176	15	*	15	*	*	*	*	64	17	13	*	51	16
70 OR OVER............	49	14	*	*	14	*	*	*	*	*	*	*	35	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS														
TOTAL......................	10,834	4,405	273	1,703	2,429	2,999	2,163	836	2,316	377	242	314	164	17
UNDER 30..............	11	8	*	3	5	*	*	*	3	*	*	*	*	*
30-34..................	1,590	1,078	24	525	529	113	113	*	211	42	98	48	*	*
35-39..................	2,455	886	15	243	628	839	722	117	581	114	4	31	*	*
40-44..................	2,408	1,077	57	291	729	793	672	121	372	74	36	44	12	*
45-49..................	1,674	693	103	456	134	541	231	310	320	*	35	85	*	*
50-54..................	1,083	298	*	84	214	368	228	140	332	23	*	62	*	*
55-59..................	1,026	290	43	95	152	220	107	113	340	48	53	44	14	17
60-64..................	272	37	31	6	*	59	24	35	127	17	16	*	16	*
65-69..................	209	38	*	*	38	66	66	*	30	13	*	*	62	*
70 OR OVER............	106	*	*	*	*	*	*	*	*	46	*	*	60	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS														
TOTAL......................	6,238	3,035	633	1,665	737	1,652	1,206	446	820	260	96	266	109	*
UNDER 30..............	149	147	2	100	45	*	*	*	2	*	*	*	*	*
30-34..................	787	531	58	328	145	117	48	69	138	1	*	*	*	*
35-39..................	1,199	721	236	379	106	321	256	65	46	*	46	65	*	*
40-44..................	1,229	664	154	314	196	340	251	89	59	79	*	87	*	*
45-49..................	897	369	71	153	145	238	168	70	214	60	*	16	*	*
50-54..................	674	294	30	189	75	268	215	53	75	*	*	37	*	*
55-59..................	633	199	50	138	11	218	166	52	131	*	34	17	34	*
60-64..................	485	94	32	48	14	134	102	32	139	55	*	44	19	*
65-69..................	120	16	*	16	*	16	*	16	*	32	16	*	40	*
70 OR OVER............	49	*	*	*	*	*	*	*	16	33	*	*	*	*
NO REPORT.............	16	*	*	*	*	*	*	*	*	*	*	*	16	*
MECHANICAL ENGINEERS														
TOTAL......................	5,577	2,234	344	875	1,015	1,039	660	379	1,502	378	132	86	206	*
UNDER 30..............	38	38	*	38	*	*	*	*	*	*	*	*	*	*
30-34..................	642	265	25	171	69	122	76	46	167	31	51	6	*	*
35-39..................	960	544	101	188	255	260	173	87	153	*	*	3	*	*
40-44..................	1,250	603	98	240	265	152	108	44	208	179	44	53	11	*
45-49..................	1,179	495	62	133	300	207	183	24	285	109	24	24	35	*
50-54..................	580	103	35	24	44	197	67	130	224	43	13	*	*	*
55-59..................	433	93	15	65	13	64	16	48	260	16	*	*	*	*
60-64..................	360	73	8	16	49	37	37	*	162	*	*	*	68	*
65-69..................	139	20	*	*	20	*	*	*	43	*	*	*	76	*
70 OR OVER............	16	*	*	*	*	*	*	*	*	*	*	*	16	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS														
TOTAL......................	2,061	916	*	502	412	671	545	126	154	183	16	123	*	*
UNDER 30..............	8	8	*	8	*	*	*	*	*	*	*	*	*	*
30-34..................	326	238	*	210	28	64	64	*	22	*	*	2	*	*
35-39..................	541	220	*	174	46	112	112	*	23	139	*	47	*	*
40-44..................	423	178	*	49	129	220	133	87	*	*	*	25	*	*
45-49..................	204	127	*	23	104	*	*	*	11	44	*	22	*	*
50-54..................	194	36	*	*	36	100	97	3	58	*	*	*	*	*
55-59..................	164	40	*	24	16	95	95	*	*	*	16	13	*	*
60-64..................	188	67	*	14	53	80	44	36	27	*	*	14	*	*
65-69..................	13	*	*	*	*	*	*	*	13	*	*	*	*	*
70 OR OVER............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS														
TOTAL......................	5,366	2,436	127	653	1,656	1,535	1,101	434	567	467	143	190	17	11
UNDER 30..............	175	138	8	76	54	3	3	*	34	*	*	*	*	*
30-34..................	863	537	38	100	399	71	71	*	210	14	*	17	3	11
35-39..................	1,537	614	23	165	426	428	275	153	133	211	77	71	3	*
40-44..................	1,009	511	58	168	285	380	267	113	27	77	14	*	*	*
45-49..................	778	248	*	60	188	315	315	*	35	85	28	67	*	*
50-54..................	323	157	*	16	141	232	96	136	64	35	*	35	*	*
55-59..................	292	120	*	31	89	63	46	17	64	21	24	*	*	*
60-64..................	157	79	*	21	58	43	28	15	*	24	*	*	11	*
65-69..................	32	32	*	16	16	*	*	*	*	*	*	*	*	*
70 OR OVER............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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TABLE B-7. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1981
CONTINUED

FIELD AND AGE	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
OTHER ENGINEERS														
TOTAL......................	12,055	4,455	813	2,325	1,317	3,668	2,372	1,296	1,969	743	256	636	252	76
UNDER 30...............	115	91	41	47	3	*	*	*	*	*	*	24	*	*
30-34..................	1,315	772	229	315	228	216	213	3	110	82	31	28	76	*
35-39..................	2,244	1,183	150	617	416	455	428	27	292	128	82	80	2	22
40-44..................	2,948	1,069	85	588	396	1,052	614	438	104	131	65	200	2	25
45-49..................	1,696	560	119	297	144	636	393	243	271	114	6	109	*	*
50-54..................	1,556	347	160	125	62	634	298	336	376	60	9	96	22	12
55-59..................	1,216	224	*	206	18	417	260	157	340	101	56	61	16	1
60-64..................	473	118	*	81	37	206	114	92	41	45	7	16	40	*
65-69..................	340	91	29	49	13	34	34	*	111	52	*	6	30	16
70 OR OVER.............	152	*	*	*	*	18	18	*	24	30	*	16	64	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS														
TOTAL......................	93,548	39,888	27,314	11,497	1,077	12,457	6,807	5,650	21,990	1,623	5,297	4,225	7,133	1,235
UNDER 30...............	2,346	1,723	1,488	218	17	87	64	23	228	2	50	66	181	9
30-34..................	14,368	8,883	6,786	1,843	254	645	481	164	2,428	139	663	729	750	131
35-39..................	20,800	10,073	7,118	2,619	336	2,116	1,229	887	4,677	335	1,553	1,174	699	173
40-44..................	16,055	6,908	4,648	2,147	113	2,434	1,446	988	3,921	246	1,017	807	419	303
45-49..................	10,968	3,974	2,316	1,476	182	2,281	1,256	1,025	3,242	150	544	426	237	114
50-54..................	9,701	3,666	2,117	1,504	45	1,794	842	952	2,735	179	416	417	316	178
55-59..................	8,070	2,575	1,540	932	103	1,732	817	915	2,348	120	472	242	416	165
60-64..................	5,653	1,444	843	588	13	1,008	480	528	1,607	166	351	233	784	60
65-69..................	3,832	600	423	170	7	334	178	156	708	192	161	100	1,668	69
70 OR OVER.............	2,027	42	35	*	7	24	12	12	82	94	70	31	1,651	33
NO REPORT..............	28	*	*	*	*	2	2	*	14	*	*	*	12	*
BIOLOGICAL SCIENTISTS														
TOTAL......................	54,442	25,647	21,332	3,853	462	5,036	2,786	2,250	15,217	751	948	1,450	4,769	624
UNDER 30...............	1,456	1,153	1,120	26	7	34	34	*	171	2	3	22	62	9
30-34..................	9,066	6,316	5,445	779	92	263	198	65	1,520	74	101	227	516	49
35-39..................	12,507	6,969	5,645	1,125	199	713	413	300	3,379	206	310	337	503	90
40-44..................	9,124	4,376	3,701	653	22	961	612	349	2,730	135	237	241	315	129
45-49..................	5,995	2,312	1,799	452	61	1,010	530	480	2,127	61	76	164	156	89
50-54..................	5,291	1,927	1,573	333	21	768	421	347	1,982	49	55	187	227	96
55-59..................	4,459	1,440	1,113	274	53	759	348	411	1,683	30	70	76	296	105
60-64..................	2,933	723	589	134	*	369	147	222	1,064	52	68	133	524	*
65-69..................	2,285	410	326	77	7	142	78	64	488	101	7	44	1,048	45
70 OR OVER.............	1,302	21	21	*	*	17	5	12	59	41	21	19	1,112	12
NO REPORT..............	24	*	*	*	*	*	*	*	14	*	*	*	10	*
AGRICULTURAL SCIENTISTS														
TOTAL......................	17,270	6,732	1,556	4,975	201	3,348	1,924	1,424	2,997	407	715	1,342	1,391	338
UNDER 30...............	287	198	97	91	10	23	*	23	33	*	*	26	7	*
30-34..................	1,888	826	254	552	20	221	167	54	497	48	67	156	18	55
35-39..................	2,981	1,201	292	856	53	469	295	174	566	99	164	379	46	57
40-44..................	3,153	1,271	266	977	28	624	391	233	548	28	172	338	59	113
45-49..................	2,231	971	137	772	62	457	265	192	452	63	95	148	45	*
50-54..................	2,062	989	186	789	14	569	255	314	230	32	45	138	39	20
55-59..................	1,740	657	176	474	7	489	281	208	256	28	104	76	91	39
60-64..................	1,648	526	134	392	*	407	219	188	303	42	47	60	227	36
65-69..................	822	86	14	72	*	89	51	38	94	39	14	21	468	11
70 OR OVER.............	456	7	*	*	7	*	*	*	18	28	7	*	389	7
NO REPORT..............	2	*	*	*	*	*	*	*	*	*	*	*	2	*
MEDICAL SCIENTISTS														
TOTAL......................	22,136	7,509	4,426	2,669	414	4,073	2,097	1,976	3,776	465	3,634	1,433	973	273
UNDER 30...............	603	372	271	101	*	30	30	*	24	*	47	18	112	*
30-34..................	3,414	1,741	1,087	512	142	161	116	45	411	17	495	346	216	27
35-39..................	5,312	1,903	1,181	638	84	934	521	413	732	30	1,079	458	150	26
40-44..................	3,778	1,261	681	517	63	849	443	406	643	83	608	228	45	61
45-49..................	2,742	691	380	252	59	814	461	353	563	26	373	114	36	25
50-54..................	2,348	750	358	382	10	457	166	291	523	98	316	92	50	62
55-59..................	1,871	478	251	184	43	484	188	296	409	62	298	90	29	21
60-64..................	1,072	195	120	62	13	232	114	118	240	72	236	40	33	24
65-69..................	725	104	83	21	*	103	49	54	126	52	140	35	152	13
70 OR OVER.............	269	14	14	*	*	7	7	*	5	25	42	12	150	14
NO REPORT..............	2	*	*	*	*	2	2	*	*	*	*	*	*	*
PSYCHOLOGISTS														
TOTAL......................	45,416	5,383	2,461	2,518	404	5,853	1,062	4,791	12,563	2,051	15,168	1,512	2,352	534
UNDER 30...............	1,438	307	130	177	*	147	37	110	215	14	678	34	5	38
30-34..................	8,369	1,529	643	843	43	718	156	562	2,258	390	2,850	308	264	52
35-39..................	10,217	1,264	646	477	141	1,219	259	960	2,747	368	3,829	367	303	120
40-44..................	6,698	784	292	412	80	795	143	652	2,070	215	2,383	164	186	101
45-49..................	5,061	563	305	195	63	869	151	718	1,583	255	1,528	146	95	22
50-54..................	4,688	344	212	129	3	988	147	841	1,354	267	1,374	223	88	50
55-59..................	3,999	290	105	159	26	625	74	551	1,270	262	1,234	82	219	17
60-64..................	2,638	164	59	100	5	355	95	260	713	77	871	96	262	100
65-69..................	1,393	116	47	26	43	122	*	122	282	85	315	54	395	24
70 OR OVER.............	901	22	22	*	*	11	*	11	71	118	101	38	530	10
NO REPORT..............	14	*	*	*	*	4	*	4	*	*	5	*	5	*
SOCIAL SCIENTISTS														
TOTAL......................	56,473	7,553	3,155	4,153	245	8,284	2,266	6,018	29,285	1,358	1,534	3,868	3,527	1,064
UNDER 30...............	790	181	57	124	*	45	7	38	403	113	32	16	*	*
30-34..................	7,174	1,466	510	909	47	578	160	418	3,958	239	154	543	102	134
35-39..................	12,517	2,403	1,055	1,288	60	2,010	865	1,145	5,801	328	391	1,085	331	168
40-44..................	11,020	1,480	689	693	98	1,791	492	1,299	5,868	337	283	850	264	167
45-49..................	6,001	535	287	227	21	1,170	161	1,009	3,331	36	200	458	126	165
50-54..................	5,669	578	196	368	14	1,090	250	840	3,334	100	120	200	164	83
55-59..................	5,253	486	175	306	5	671	165	506	3,158	24	156	352	226	180
60-64..................	3,859	217	84	133	*	577	138	439	2,343	94	89	113	282	144
65-69..................	2,560	151	76	75	*	270	28	242	957	39	66	234	804	39
70 OR OVER.............	1,625	56	26	30	*	82	*	82	127	48	43	17	1,228	24
NO REPORT..............	5	*	*	*	*	*	*	*	5	*	*	*	*	*

* NO CASES REPORTED

TABLE B-7. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1981
CONTINUED

FIELD AND AGE	TOTAL	RESEARCH AND DEVELOPMENT TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	MANAGEMENT OR ADMIN TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
ECONOMISTS														
TOTAL	14,294	2,972	778	2,171	23	1,815	628	1,187	6,769	615	283	787	868	185
UNDER 30	449	148	32	116	*	*	*	*	183	113	*	5	*	*
30-34	2,231	643	191	452	*	47	15	32	1,277	62	*	164	3	35
35-39	2,935	945	218	707	20	367	245	122	1,179	152	46	220	15	11
40-44	2,536	487	198	286	3	445	140	305	1,109	157	47	197	79	15
45-49	1,008	192	71	121	*	195	34	161	519	33	*	51	14	4
50-54	1,560	320	50	270	*	186	80	106	851	28	66	69	22	18
55-59	1,339	117	*	117	*	232	36	196	832	*	79	*	31	48
60-64	877	79	18	61	*	127	50	77	498	28	*	24	85	36
65-69	866	41	*	41	*	152	28	124	273	24	28	50	280	18
70 OR OVER	490	*	*	*	*	64	*	64	45	18	17	7	339	*
NO REPORT	3	*	*	*	*	*	*	*	3	*	*	*	*	*
SOCIOLOGISTS/ANTHRO.														
TOTAL	11,909	1,821	1,006	809	6	1,288	349	939	6,859	18	255	480	911	277
UNDER 30	63	3	3	*	*	22	*	22	27	*	*	11	*	*
30-34	1,198	285	147	136	2	25	21	4	740	*	43	57	45	3
35-39	2,724	506	271	235	*	290	99	191	1,517	5	155	84	92	75
40-44	2,380	333	122	211	*	310	156	154	1,568	8	5	100	35	21
45-49	1,333	120	92	28	*	214	23	191	839	*	19	61	80	*
50-54	1,186	189	121	64	4	136	6	130	708	*	4	33	69	47
55-59	1,137	197	122	75	*	122	26	96	622	*	8	75	26	84
60-64	903	87	65	22	*	130	18	112	600	3	*	6	30	47
65-69	506	48	40	8	*	39	*	39	220	2	*	46	151	*
70 OR OVER	479	53	23	30	*	*	*	*	18	*	21	4	383	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER SOCIAL SCIENTISTS														
TOTAL	30,270	2,760	1,371	1,173	216	5,181	1,289	3,892	15,657	725	996	2,601	1,748	602
UNDER 30	278	30	22	8	*	23	7	16	193	*	32	*	*	*
30-34	3,745	538	172	321	45	506	124	382	1,961	177	111	322	54	96
35-39	6,858	952	566	346	40	1,353	521	832	3,105	171	190	781	224	82
40-44	6,104	660	369	196	95	1,036	196	840	3,191	172	231	553	150	111
45-49	3,660	223	124	78	21	761	104	657	1,973	3	181	346	32	141
50-54	2,923	69	25	34	10	768	164	604	1,775	72	50	98	73	18
55-59	2,777	172	53	114	5	317	103	214	1,704	24	69	274	169	48
60-64	2,079	51	1	50	*	320	70	250	1,245	63	89	83	167	61
65-69	1,188	62	36	26	*	79	*	79	464	13	38	138	373	21
70 OR OVER	656	3	3	*	*	18	*	18	64	30	5	6	506	24
NO REPORT	2	*	*	*	*	*	*	*	2	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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FIELD AND RACE	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN					SALES/			
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
ALL FIELDS														
TOTAL....................	363,866	120,108	55,265	46,475	18,368	60,312	32,649	27,663	104,956	12,035	25,724	16,441	20,328	3,962
WHITE....................	322,853	102,822	48,843	39,349	14,630	55,006	29,169	25,837	94,109	10,599	23,739	14,844	18,455	3,279
BLACK....................	4,609	850	415	363	72	971	317	654	1,709	113	347	158	289	172
AM. INDIAN/ALSKN NATIVE	2,325	591	259	257	75	325	144	181	816	100	271	73	127	22
ASIAN/PACIFIC ISLANDER.	27,857	13,932	4,803	5,838	3,291	3,332	2,624	708	6,173	1,030	882	1,165	980	363
NO REPORT..............	6,222	1,913	945	668	300	678	395	283	2,149	193	485	201	477	126
PHYSICAL SCIENTISTS														
TOTAL....................	67,693	29,681	13,876	12,725	3,080	11,892	8,710	3,182	15,609	1,128	1,446	2,865	4,504	568
WHITE....................	59,740	25,111	11,958	10,550	2,603	10,896	7,962	2,934	14,110	1,066	1,276	2,543	4,221	517
BLACK....................	644	224	108	99	17	142	82	60	225	*	13	10	29	1
AM. INDIAN/ALSKN NATIVE	296	140	90	34	16	9	4	5	137	*	*	10	*	*
ASIAN/PACIFIC ISLANDER.	5,838	3,762	1,463	1,904	395	685	573	112	827	18	135	223	138	50
NO REPORT..............	1,175	444	257	138	49	160	89	71	310	44	22	79	116	*
CHEMISTS														
TOTAL....................	45,376	18,548	8,087	8,376	2,085	8,985	6,855	2,130	9,661	876	1,181	2,329	3,405	391
WHITE....................	40,150	15,540	6,918	6,886	1,736	8,216	6,236	1,980	8,889	832	1,081	2,044	3,208	340
BLACK....................	380	148	74	59	15	56	46	10	151	*	13	6	5	1
AM. INDIAN/ALSKN NATIVE	201	103	88	15	*	9	4	5	79	*	*	10	*	*
ASIAN/PACIFIC ISLANDER.	3,898	2,512	827	1,400	285	579	493	86	381	*	87	212	77	50
NO REPORT..............	747	245	180	16	49	125	76	49	161	44	*	57	115	*
PHYSICISTS/ASTRONOMERS														
TOTAL....................	22,317	11,133	5,789	4,349	995	2,907	1,855	1,052	5,948	252	265	536	1,099	177
WHITE....................	19,590	9,571	5,040	3,664	867	2,680	1,726	954	5,221	234	195	499	1,013	177
BLACK....................	264	76	34	40	2	86	36	50	74	*	*	4	24	*
AM. INDIAN/ALSKN NATIVE	95	37	2	19	16	*	*	*	58	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	1,940	1,250	636	504	110	106	80	26	446	18	48	11	61	*
NO REPORT..............	428	199	77	122	*	35	13	22	149	*	22	22	1	*
MATHEMATICAL SCIENTISTS														
TOTAL....................	16,470	3,390	1,756	1,239	395	1,316	284	1,032	9,602	458	301	383	876	144
WHITE....................	14,486	3,049	1,532	1,136	381	1,207	259	948	8,373	381	230	326	796	124
BLACK....................	200	29	7	8	14	38	5	33	118	*	2	*	8	5
AM. INDIAN/ALSKN NATIVE	74	*	*	*	*	14	*	14	43	2	*	15	*	*
ASIAN/PACIFIC ISLANDER.	1,221	201	122	79	*	37	8	29	811	37	69	28	38	*
NO REPORT..............	489	111	95	16	*	20	12	8	257	38	*	14	34	15
MATHEMATICIANS														
TOTAL....................	13,819	2,731	1,631	761	339	1,147	213	934	8,277	161	223	378	781	121
WHITE....................	12,258	2,431	1,416	676	339	1,057	205	852	7,298	156	181	321	708	106
BLACK....................	177	13	5	8	*	36	5	31	118	*	2	*	8	*
AM. INDIAN/ALSKN NATIVE	54	*	*	*	*	14	*	14	25	*	*	15	*	*
ASIAN/PACIFIC ISLANDER.	937	176	115	61	*	32	3	29	625	5	40	28	31	*
NO REPORT..............	393	111	95	16	*	8	*	8	211	*	*	14	34	15
STATISTICIANS														
TOTAL....................	2,651	659	125	478	56	169	71	98	1,325	297	78	5	95	23
WHITE....................	2,228	518	116	460	42	150	54	96	1,075	225	49	5	88	18
BLACK....................	23	16	2	*	14	2	*	2	*	*	*	*	*	5
AM. INDIAN/ALSKN NATIVE	20	*	*	*	*	*	*	*	18	2	*	*	*	*
ASIAN/PACIFIC ISLANDER.	284	25	7	18	*	5	5	*	186	32	29	*	7	*
NO REPORT..............	96	*	*	*	*	12	12	*	46	38	*	*	*	*
COMPUTER SPECIALISTS														
TOTAL....................	9,066	4,512	620	884	3,008	1,693	808	885	1,546	554	217	424	18	102
WHITE....................	7,942	3,864	567	732	2,565	1,584	745	839	1,334	533	213	396	18	*
BLACK....................	20	6	*	*	6	3	*	3	6	5	*	*	*	*
AM. INDIAN/ALSKN NATIVE	17	7	*	*	7	3	*	3	2	2	*	3	*	*
ASIAN/PACIFIC ISLANDER.	886	472	40	116	316	73	48	25	196	14	4	25	*	102
NO REPORT..............	201	163	13	36	114	30	15	15	8	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS														
TOTAL....................	16,589	6,321	3,306	2,729	286	3,624	2,410	1,214	3,617	1,045	395	882	560	145
WHITE....................	15,547	5,881	3,058	2,553	270	3,374	2,183	1,191	3,437	990	385	834	539	107
BLACK....................	41	22	4	18	*	11	2	9	8	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	56	48	37	11	*	*	*	*	5	*	*	3	*	*
ASIAN/PACIFIC ISLANDER.	749	286	159	113	14	201	194	7	98	55	10	43	18	38
NO REPORT..............	196	84	48	34	2	38	31	7	69	*	*	2	3	*
EARTH SCIENTISTS														
TOTAL....................	12,605	4,076	1,755	2,067	254	2,719	1,680	1,039	3,101	927	373	805	484	120
WHITE....................	11,845	3,798	1,615	1,943	240	2,530	1,509	1,021	2,971	878	366	757	463	82
BLACK....................	32	20	2	18	*	6	2	4	6	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	67	39	28	11	*	*	*	*	5	*	*	3	*	*
ASIAN/PACIFIC ISLANDER.	535	172	85	75	12	158	151	7	50	49	7	43	18	38
NO REPORT..............	146	47	25	20	2	25	18	7	69	*	*	2	3	*
OCEANOGRAPHERS														
TOTAL....................	1,818	1,028	792	224	12	445	345	100	182	53	20	36	36	18
WHITE....................	1,701	971	738	221	12	424	329	95	146	53	17	36	36	18
BLACK....................	7	*	*	*	*	5	*	5	2	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	7	7	7	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	102	50	47	3	*	15	15	*	34	*	3	*	*	*
NO REPORT..............	1	*	*	*	*	1	1	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS														
TOTAL....................	2,166	1,217	759	438	20	460	385	75	334	65	2	41	40	7
WHITE....................	2,001	1,112	705	389	18	420	345	75	320	59	2	41	40	7
BLACK....................	2	2	2	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	2	2	2	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	112	64	27	35	2	28	28	*	14	6	*	*	*	*
NO REPORT..............	49	37	23	14	*	12	12	*	*	*	*	*	*	*
ENGINEERS														
TOTAL....................	58,311	23,380	2,777	10,730	9,873	15,193	10,302	4,891	10,744	3,818	1,366	2,282	1,358	170
WHITE....................	47,678	17,430	2,200	7,980	7,250	13,456	8,843	4,613	9,481	2,915	1,250	1,882	1,126	138
BLACK....................	270	94	4	77	13	75	52	23	44	13	*	12	*	32
AM. INDIAN/ALSKN NATIVE	437	155	2	101	32	93	39	54	94	47	*	4	44	*
ASIAN/PACIFIC ISLANDER.	9,055	5,297	474	2,396	2,427	1,433	1,232	201	881	807	116	349	172	*
NO REPORT..............	871	404	97	176	131	136	136	*	244	36	*	35	16	*

* NO CASES REPORTED

FIELD AND RACE	TOTAL	RESEARCH AND DEVELOPMENT TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	MANAGEMENT OR ADMIN TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
AERO/ASTRO ENGINEERS														
TOTAL......................	2,536	1,076	175	588	313	838	620	218	387	40	84	50	18	43
WHITE....................	2,250	819	140	438	241	835	617	218	371	40	82	42	18	43
BLACK....................	10	2	*	2	*	*	*	*	*	*	*	8	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	260	239	35	132	72	3	3	*	16	*	2	*	*	*
NO REPORT..............	16	16	*	16	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS														
TOTAL......................	7,612	3,605	278	1,847	1,480	1,624	1,192	432	963	387	212	355	466	*
WHITE....................	5,895	2,404	203	1,198	1,003	1,427	995	432	763	387	212	303	399	*
BLACK....................	37	37	4	33	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	5	2	2	*	*	*	*	*	3	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	1,621	1,162	69	616	477	156	156	*	184	*	*	52	67	*
NO REPORT..............	54	*	*	*	*	41	41	*	13	*	*	*	*	*
CIVIL ENGINEERS														
TOTAL......................	6,032	1,220	134	572	514	1,167	443	724	2,066	983	185	262	126	23
WHITE....................	4,788	752	127	410	215	1,029	342	687	1,925	534	183	223	126	16
BLACK....................	24	*	*	*	*	8	8	*	9	*	*	*	*	7
AM. INDIAN/ALSKN NATIVE	11	*	*	*	*	8	*	8	3	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	1,163	468	7	162	299	122	93	29	83	449	2	39	*	*
NO REPORT..............	46	*	*	*	*	*	*	*	46	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS														
TOTAL......................	10,834	4,405	273	1,703	2,429	2,999	2,163	836	2,316	377	242	314	164	17
WHITE....................	8,952	3,230	178	1,225	1,827	2,756	1,957	799	1,932	347	226	308	136	17
BLACK....................	43	8	*	8	*	7	*	7	28	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	131	102	*	92	10	3	3	*	24	*	*	2	*	*
ASIAN/PACIFIC ISLANDER.	1,578	1,013	95	362	556	229	199	30	258	30	16	4	28	*
NO REPORT..............	130	52	*	16	36	4	4	*	74	*	*	*	*	*
MATERIALS SCI. ENGINEERS														
TOTAL......................	6,238	3,035	633	1,665	737	1,652	1,206	446	820	260	96	266	109	*
WHITE....................	5,234	2,322	545	1,213	564	1,514	1,068	446	699	244	96	266	93	*
BLACK....................	5	5	*	3	2	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	14	*	*	*	*	7	7	*	7	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	818	620	68	383	169	121	121	*	77	*	*	*	*	*
NO REPORT..............	167	88	20	66	2	10	10	*	37	16	*	*	16	*
MECHANICAL ENGINEERS														
TOTAL......................	5,577	2,234	344	875	1,015	1,039	660	379	1,502	378	132	86	206	*
WHITE....................	4,307	1,485	140	682	663	864	504	360	1,313	325	81	77	162	*
BLACK....................	10	*	*	*	*	3	3	*	7	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	64	*	*	*	*	*	*	*	20	*	*	*	44	*
ASIAN/PACIFIC ISLANDER.	1,045	659	127	193	339	172	153	19	101	53	51	9	*	*
NO REPORT..............	151	90	77	*	13	*	*	*	61	*	*	*	*	*
NUCLEAR ENGINEERS														
TOTAL......................	2,061	914	*	502	412	671	545	126	154	183	16	123	*	*
WHITE....................	1,602	684	*	369	315	522	498	24	130	152	16	98	*	*
BLACK....................	3	3	*	3	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	376	183	*	130	53	126	24	102	11	31	*	25	*	*
NO REPORT..............	80	44	*	*	44	23	23	*	13	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS														
TOTAL......................	5,366	2,436	127	653	1,656	1,535	1,101	434	567	467	143	190	17	11
WHITE....................	4,736	2,160	119	635	1,406	1,446	1,015	431	557	286	132	130	14	11
BLACK....................	6	2	*	*	2	4	4	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	93	51	*	9	42	3	3	*	*	39	*	*	*	*
ASIAN/PACIFIC ISLANDER.	465	223	8	9	206	69	66	3	10	124	11	25	3	*
NO REPORT..............	66	*	*	*	*	13	13	*	*	18	*	35	*	*
OTHER ENGINEERS														
TOTAL......................	12,055	4,455	813	2,325	1,317	3,668	2,372	1,296	1,969	743	256	636	252	76
WHITE....................	9,914	3,574	748	1,810	1,016	3,063	1,847	1,216	1,791	600	222	435	178	51
BLACK....................	132	37	*	28	9	53	37	16	*	13	*	4	*	25
AM. INDIAN/ALSKN NATIVE	119	*	*	*	*	72	26	46	37	8	*	2	*	*
ASIAN/PACIFIC ISLANDER.	1,729	730	65	409	256	435	417	18	141	120	34	195	74	*
NO REPORT..............	161	114	*	78	36	45	45	*	*	2	*	*	*	*
LIFE SCIENTISTS														
TOTAL......................	93,848	39,888	27,314	11,497	1,077	12,457	6,807	5,650	21,990	1,623	5,297	4,225	7,133	1,235
WHITE....................	84,329	35,398	24,170	10,259	969	11,461	6,160	5,301	19,846	1,554	4,669	3,919	6,473	1,009
BLACK....................	1,185	272	204	64	4	224	98	126	419	13	66	47	96	48
AM. INDIAN/ALSKN NATIVE	551	201	130	71	*	109	68	41	127	10	41	24	25	14
ASIAN/PACIFIC ISLANDER.	6,416	3,497	2,475	918	104	570	426	144	1,262	34	348	231	339	135
NO REPORT..............	1,367	520	335	185	*	93	55	38	336	12	173	4	200	29
BIOLOGICAL SCIENTISTS														
TOTAL......................	54,442	25,647	21,332	3,853	462	5,036	2,786	2,250	15,217	751	948	1,450	4,769	624
WHITE....................	48,663	22,719	18,950	3,354	415	4,476	2,371	2,105	13,710	710	879	1,322	4,366	481
BLACK....................	663	151	122	29	*	122	56	66	264	13	14	33	52	14
AM. INDIAN/ALSKN NATIVE	335	92	72	20	*	73	54	19	110	10	*	12	24	14
ASIAN/PACIFIC ISLANDER.	4,025	2,367	1,923	397	47	344	305	39	877	11	50	83	200	93
NO REPORT..............	756	318	265	53	*	21	*	21	256	7	5	*	127	22
AGRICULTURAL SCIENTISTS														
TOTAL......................	17,270	6,732	1,556	4,975	201	3,348	1,924	1,424	2,997	407	715	1,342	1,391	338
WHITE....................	15,998	6,185	1,410	4,590	185	3,214	1,828	1,386	2,779	393	629	1,271	1,218	309
BLACK....................	209	44	17	25	2	33	20	13	82	*	3	*	42	5
AM. INDIAN/ALSKN NATIVE	113	54	11	43	*	14	*	14	11	*	22	12	*	*
ASIAN/PACIFIC ISLANDER.	771	377	101	262	14	67	67	*	97	14	61	59	72	24
NO REPORT..............	179	72	17	55	*	20	9	11	28	*	*	*	59	*
MEDICAL SCIENTISTS														
TOTAL......................	22,136	7,509	4,426	2,669	414	4,073	2,097	1,976	3,776	465	3,634	1,433	973	273
WHITE....................	19,668	6,494	3,810	2,315	369	3,771	1,961	1,810	3,357	451	3,161	1,326	889	219
BLACK....................	313	77	65	10	2	69	22	47	73	*	49	14	2	29
AM. INDIAN/ALSKN NATIVE	103	55	47	8	*	22	14	8	6	*	19	*	1	*
ASIAN/PACIFIC ISLANDER.	1,620	753	451	259	43	159	54	105	288	9	237	89	67	18
NO REPORT..............	432	130	53	77	*	52	46	6	52	5	168	4	14	7

* NO CASES REPORTED

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		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN								
FIELD AND RACE	TOTAL	TOTAL	BASIC RE- SEARCH	APPL'D RE- SEARCH	DEVEL- OPMENT	TOTAL	OF R&D	OF OTHER	TEACH- ING	CON- SULT- ING	SALES/ PROF. SER- VICES	OTHER	NOT EM- PLOYED	NO REPORT
PSYCHOLOGISTS														
TOTAL......................	45,416	5,383	2,461	2,518	404	5,853	1,062	4,791	12,563	2,051	15,168	1,512	2,352	534
WHITE....................	42,666	5,133	2,385	2,376	372	5,446	984	4,462	11,691	1,904	14,324	1,445	2,244	479
BLACK....................	853	70	26	39	5	165	19	146	281	65	202	9	37	24
AM. INDIAN/ALSKN NATIVE	475	19	*	19	*	75	31	44	109	38	230	4	*	*
ASIAN/PACIFIC ISLANDER.	609	81	18	36	27	72	28	44	219	28	130	47	30	2
NO REPORT................	813	80	32	48	*	95	*	95	263	16	282	7	41	29
SOCIAL SCIENTISTS														
TOTAL......................	56,473	7,553	3,155	4,153	245	8,284	2,266	6,018	29,285	1,358	1,534	3,868	3,527	1,064
WHITE....................	50,465	6,956	2,973	3,763	220	7,582	2,033	5,549	25,837	1,256	1,392	3,499	3,038	905
BLACK....................	1,396	133	62	58	13	313	59	254	608	17	64	80	119	62
AM. INDIAN/ALSKN NATIVE	419	21	*	21	*	22	2	20	299	1	*	10	58	8
ASIAN/PACIFIC ISLANDER.	3,083	336	52	276	8	261	115	146	1,879	37	70	219	245	36
NO REPORT................	1,110	107	68	35	4	106	57	49	662	47	8	60	67	53
ECONOMISTS														
TOTAL......................	14,294	2,972	778	2,171	23	1,815	628	1,187	6,769	615	283	787	868	185
WHITE....................	12,574	2,696	747	1.931	18	1,666	548	1,118	5,785	578	265	690	737	157
BLACK....................	234	26	*	26	*	33	33	*	83	*	*	34	30	28
AM. INDIAN/ALSKN NATIVE	242	*	*	*	*	5	*	5	219	*	*	*	18	*
ASIAN/PACIFIC ISLANDER.	1,165	250	31	214	5	111	47	64	621	37	18	63	65	*
NO REPORT................	79	*	*	*	*	*	*	*	61	*	*	*	18	*
SOCIOLOGISTS/ANTHRO.														
TOTAL......................	11,909	1,821	1,006	809	6	1,288	349	939	6,859	18	255	480	911	277
WHITE....................	10,804	1,742	960	778	4	1,213	315	898	6,196	13	246	428	776	190
BLACK....................	343	50	41	7	2	36	6	30	184	4	*	9	38	22
AM. INDIAN/ALSKN NATIVE	65	8	*	8	*	7	2	5	45	1	*	*	*	4
ASIAN/PACIFIC ISLANDER.	427	16	*	16	*	5	*	5	262	*	9	21	78	36
NO REPORT................	270	5	5	*	*	27	26	1	172	*	*	22	19	25
OTHER SOCIAL SCIENTISTS														
TOTAL......................	30,270	2,760	1,371	1,173	216	5,181	1,289	3,892	15,657	725	996	2,601	1,748	602
WHITE....................	27,087	2,518	1,266	1,054	198	4,703	1,170	3,533	13,856	665	881	2,381	1,525	558
BLACK....................	819	57	21	25	11	244	20	226	341	13	64	37	51	12
AM. INDIAN/ALSKN NATIVE	112	13	*	13	*	10	*	10	35	*	*	10	40	4
ASIAN/PACIFIC ISLANDER.	1,491	70	21	46	3	145	68	77	996	*	43	135	102	*
NO REPORT................	751	102	63	35	4	79	31	48	429	47	8	38	30	28

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

FIELD AND TYPE OF EMPLOYER	TOTAL	RESEARCH AND DEVELOPMENT TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	MANAGEMENT OR ADMIN TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
ALL FIELDS														
TOTAL......................	363,866	120,108	55,265	46,475	18,368	60,312	32,649	27,663	104,956	12,035	25,724	16,441	20,328	3,962
BUSINESS/INDUSTRY........	99,020	43,636	6,347	21,849	15,440	24,627	18,543	6,084	495	9,550	11,969	7,565	*	1,178
EDUCATIONAL INSTITUTIONS	186,809	52,634	37,895	13,698	1,041	18,840	4,365	14,475	103,905	984	4,933	3,628	*	1,885
4-YR. COLL./UNIV......	179,010	52,504	37,827	13,662	1,015	17,665	4,332	13,313	99,023	772	3,839	3,442	*	1,785
2-YR. COLLEGES.........	5,035	66	44	6	16	553	21	532	4,031	69	198	76	*	42
ELEM/SEC. SCHOOLS......	2,764	64	24	30	10	642	12	630	851	143	896	110	*	58
HOSPITALS/CLINICS.......	9,862	1,693	1,268	329	96	1,644	260	1,384	140	296	5,492	527	*	70
NONPROFIT ORGS...........	12,581	6,068	3,013	2,492	563	3,847	2,379	1,468	54	419	1,128	960	*	105
FEDERAL GOVT.............	25,087	13,692	6,082	6,837	773	7,759	5,849	1,910	106	373	775	2,281	*	101
MILITARY/COMM. CORPS....	2,052	406	193	174	39	807	509	298	187	29	314	309	*	*
STATE GOVT...............	4,454	1,214	453	645	116	1,779	503	1,276	31	261	501	650	*	18
OTHER GOVT...............	2,068	406	7	157	242	689	94	595	19	63	605	279	*	7
OTHER.....................	992	349	*	291	58	320	147	173	9	58	7	234	*	15
NOT EMPLOYED.............	20,328	*	*	*	*	*	*	*	*	*	*	*	20,328	*
NO REPORT................	613	10	7	3	*	*	*	*	10	2	*	8	*	583
PHYSICAL SCIENTISTS														
TOTAL......................	67,693	29,681	13,876	12,725	3,080	11,892	8,710	3,182	15,609	1,128	1,446	2,865	4,504	568
BUSINESS/INDUSTRY........	27,401	15,436	3,731	9,120	2,585	7,634	6,482	1,152	112	1,030	1,104	1,789	*	296
EDUCATIONAL INSTITUTIONS	28,333	9,775	7,833	1,683	259	2,285	828	1,457	15,497	53	136	378	*	209
4-YR. COLL./UNIV......	26,897	9,760	7,818	1,683	259	2,206	828	1,378	14,160	53	136	378	*	204
2-YR. COLLEGES.........	1,162	15	15	*	*	71	*	71	1,076	*	*	*	*	*
ELEM/SEC. SCHOOLS......	274	*	*	*	*	8	*	8	261	*	*	*	*	5
HOSPITALS/CLINICS.......	518	207	108	55	44	198	52	146	*	*	44	69	*	*
NONPROFIT ORGS...........	2,071	1,311	688	531	92	464	297	167	*	30	111	136	*	19
FEDERAL GOVT.............	4,343	2,820	1,446	1,311	63	1,099	970	129	*	15	49	345	*	15
MILITARY/COMM. CORPS....	136	52	20	18	14	80	65	15	*	*	*	4	*	*
STATE GOVT...............	258	57	50	7	*	108	4	104	*	*	2	91	*	*
OTHER GOVT...............	100	23	*	*	23	24	12	12	*	*	*	53	*	*
OTHER.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	4,504	*	*	*	*	*	*	*	*	*	*	*	4,504	*
NO REPORT................	29	*	*	*	*	*	*	*	*	*	*	*	*	29
CHEMISTS														
TOTAL......................	45,376	18,548	8,087	8,376	2,085	8,985	6,855	2,130	9,461	876	1,181	2,329	3,405	391
BUSINESS/INDUSTRY........	22,250	11,817	2,785	7,110	1,922	6,703	5,787	916	52	842	976	1,648	*	212
EDUCATIONAL INSTITUTIONS	15,772	4,698	4,099	527	72	1,022	194	828	9,609	26	95	189	*	133
4-YR. COLL./UNIV......	14,621	4,683	4,084	527	72	967	194	773	8,533	26	95	189	*	128
2-YR. COLLEGES.........	923	15	15	*	*	47	*	47	861	*	*	*	*	*
ELEM/SEC. SCHOOLS......	228	*	*	*	*	8	*	8	215	*	*	*	*	5
HOSPITALS/CLINICS.......	405	185	108	55	22	141	28	113	*	*	12	67	*	*
NONPROFIT ORGS...........	1,033	522	353	165	4	334	229	105	*	8	69	81	*	19
FEDERAL GOVT.............	2,131	1,228	689	497	42	634	573	61	*	*	27	227	*	15
MILITARY/COMM. CORPS....	65	18	3	15	*	43	28	15	*	*	*	4	*	*
STATE GOVT...............	203	57	50	7	*	84	4	80	*	*	2	60	*	*
OTHER GOVT...............	100	23	*	*	23	24	12	12	*	*	*	53	*	*
OTHER.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	3,405	*	*	*	*	*	*	*	*	*	*	*	3,405	*
NO REPORT................	12	*	*	*	*	*	*	*	*	*	*	*	*	12
PHYSICISTS/ASTRONOMERS														
TOTAL......................	22,317	11,133	5,789	4,349	995	2,907	1,855	1,052	5,948	252	265	536	1,099	177
BUSINESS/INDUSTRY........	5,151	3,619	946	2,010	663	931	695	236	60	188	128	141	*	84
EDUCATIONAL INSTITUTIONS	12,561	5,077	3,734	1,156	187	1,263	634	629	5,888	27	41	189	*	76
4-YR. COLL./UNIV......	12,276	5,077	3,734	1,156	187	1,239	634	605	5,627	27	41	189	*	76
2-YR. COLLEGES.........	239	*	*	*	*	24	*	24	215	*	*	*	*	*
ELEM/SEC. SCHOOLS......	46	*	*	*	*	*	*	*	46	*	*	*	*	*
HOSPITALS/CLINICS.......	113	22	*	*	22	57	24	33	*	*	32	2	*	*
NONPROFIT ORGS...........	1,038	789	335	366	88	130	68	62	*	22	42	55	*	*
FEDERAL GOVT.............	2,212	1,592	757	814	21	465	397	68	*	15	22	118	*	*
MILITARY/COMM. CORPS....	71	34	17	3	14	37	37	*	*	*	*	*	*	*
STATE GOVT...............	55	*	*	*	*	24	*	24	*	*	*	31	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	1,099	*	*	*	*	*	*	*	*	*	*	*	1,099	*
NO REPORT................	17	*	*	*	*	*	*	*	*	*	*	*	*	17
MATHEMATICAL SCIENTISTS														
TOTAL......................	16,470	3,390	1,756	1,239	395	1,316	284	1,032	9,602	458	301	383	876	144
BUSINESS/INDUSTRY........	1,621	697	47	431	219	146	75	71	38	346	240	154	*	*
EDUCATIONAL INSTITUTIONS	12,739	2,011	1,646	330	35	974	47	927	9,537	30	29	69	*	89
4-YR. COLL./UNIV......	12,294	1,997	1,646	330	21	938	46	892	9,158	30	29	53	*	89
2-YR. COLLEGES.........	302	14	*	*	14	21	1	20	251	*	*	16	*	*
ELEM/SEC. SCHOOLS......	143	*	*	*	*	15	*	15	128	*	*	*	*	*
HOSPITALS/CLINICS.......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	263	127	15	109	3	37	19	18	*	32	4	61	*	2
FEDERAL GOVT.............	852	541	48	369	124	143	143	*	*	50	28	76	*	14
MILITARY/COMM. CORPS....	57	*	*	*	*	14	*	14	20	*	*	23	*	*
STATE GOVT...............	2	*	*	*	*	2	*	2	*	*	*	*	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER.....................	14	14	*	*	14	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	876	*	*	*	*	*	*	*	*	*	*	*	876	*
NO REPORT................	46	*	*	*	*	*	*	*	7	*	*	*	*	39
MATHEMATICIANS														
TOTAL......................	13,819	2,731	1,631	761	339	1,147	213	934	8,277	161	223	378	781	121
BUSINESS/INDUSTRY........	1,159	533	25	311	197	102	45	57	25	155	190	154	*	*
EDUCATIONAL INSTITUTIONS	11,007	1,721	1,552	154	15	890	47	843	8,225	2	29	64	*	76
4-YR. COLL./UNIV......	10,564	1,707	1,552	154	1	854	46	808	7,848	2	29	48	*	76
2-YR. COLLEGES.........	300	14	*	*	14	21	1	20	249	*	*	16	*	*
ELEM/SEC. SCHOOLS......	143	*	*	*	*	15	*	15	128	*	*	*	*	*
HOSPITALS/CLINICS.......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	224	118	15	100	3	37	19	18	*	2	4	61	*	2
FEDERAL GOVT.............	553	359	39	196	124	102	102	*	*	2	*	76	*	14
MILITARY/COMM. CORPS....	57	*	*	*	*	14	*	14	20	*	*	23	*	*
STATE GOVT...............	2	*	*	*	*	2	*	2	*	*	*	*	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	781	*	*	*	*	*	*	*	*	*	*	*	781	*
NO REPORT................	36	*	*	*	*	*	*	*	7	*	*	*	*	29

* NO CASES REPORTED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN								
FIELD AND TYPE OF EMPLOYER	TOTAL	TOTAL	BASIC RE- SEARCH	APPL'D RE- SEARCH	DEVEL- OPMENT	TOTAL	OF R&D	OF OTHER	TEACH- ING	CON- SULT- ING	SALES/ PROF. SER- VICES	OTHER	NOT EM- PLOYED	NO REPORT
STATISTICIANS														
TOTAL......................	2,651	659	125	478	56	169	71	98	1,325	297	78	5	95	23
BUSINESS/INDUSTRY........	462	164	22	120	22	44	30	14	13	191	50	*	*	*
EDUCATIONAL INSTITUTIONS	1,732	290	94	176	20	84	*	84	1,312	28	*	5	*	13
4-YR. COLL./UNIV.......	1,730	290	94	176	20	84	*	84	1,310	28	*	5	*	13
2-YR. COLLEGES.........	2	*	*	*	*	*	*	*	2	*	*	*	*	*
ELEM/SEC. SCHOOLS......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	39	9	*	9	*	*	*	*	*	30	*	*	*	*
FEDERAL GOVT.............	299	182	9	173	*	41	41	*	*	48	28	*	*	*
MILITARY/COMM. CORPS.....	*	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER....................	14	14	*	*	14	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	95	*	*	*	*	*	*	*	*	*	*	*	95	*
NO REPORT................	10	*	*	*	*	*	*	*	*	*	*	*	*	10
COMPUTER SPECIALISTS														
TOTAL......................	9,066	4,512	620	884	3,008	1,693	808	885	1,546	554	217	424	18	102
BUSINESS/INDUSTRY........	5,212	3,303	158	632	2,513	902	563	339	31	451	108	315	*	102
EDUCATIONAL INSTITUTIONS	3,010	830	389	181	260	525	78	447	1,515	63	50	27	*	*
4-YR. COLL./UNIV.......	2,954	823	389	181	253	522	78	444	1,469	63	50	27	*	*
2-YR. COLLEGES.........	49	*	*	*	*	3	*	3	46	*	*	*	*	*
ELEM/SEC. SCHOOLS......	7	7	*	*	7	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	20	*	*	*	*	20	20	*	*	*	*	*	*	*
NONPROFIT ORGS...........	276	139	29	44	66	65	40	25	*	12	36	24	*	*
FEDERAL GOVT.............	355	118	44	25	49	136	104	32	*	28	20	53	*	*
MILITARY/COMM. CORPS.....	23	14	*	*	14	6	3	3	*	*	*	3	*	*
STATE GOVT...............	48	4	*	2	2	39	*	39	*	*	3	2	*	*
OTHER GOVT...............	104	104	*	*	104	*	*	*	*	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	18	*	*	*	*	*	*	*	*	*	*	*	18	*
NO REPORT................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS														
TOTAL......................	16,589	6,321	3,306	2,729	286	3,624	2,410	1,214	3,617	1,045	395	882	560	145
BUSINESS/INDUSTRY........	4,788	1,548	304	1,106	138	1,478	794	684	24	1,017	233	463	*	25
EDUCATIONAL INSTITUTIONS	6,772	2,377	1,659	642	76	568	376	192	3,566	*	53	115	*	93
4-YR. COLL./UNIV.......	6,611	2,377	1,659	642	76	559	376	183	3,447	*	20	115	*	93
2-YR. COLLEGES.........	128	*	*	*	*	*	*	*	95	*	33	*	*	*
ELEM/SEC. SCHOOLS......	33	*	*	*	*	9	*	9	24	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	623	399	270	129	*	162	141	21	*	8	*	54	*	*
FEDERAL GOVT.............	3,069	1,820	972	794	54	1,045	856	189	27	2	70	102	*	3
MILITARY/COMM. CORPS.....	115	19	18	1	*	90	77	13	*	6	*	*	*	*
STATE GOVT...............	562	146	83	57	6	259	157	102	*	6	32	119	*	*
OTHER GOVT...............	54	12	*	*	12	13	*	13	*	6	*	23	*	*
OTHER....................	16	*	*	*	*	9	9	*	*	*	7	*	*	*
NOT EMPLOYED.............	560	*	*	*	*	*	*	*	*	*	*	*	560	*
NO REPORT................	30	*	*	*	*	*	*	*	*	*	*	6	*	24
EARTH SCIENTISTS														
TOTAL......................	12,605	4,076	1,755	2,067	254	2,719	1,680	1,039	3,101	927	373	805	484	120
BUSINESS/INDUSTRY........	4,213	1,290	201	965	124	1,300	672	628	24	911	232	431	*	25
EDUCATIONAL INSTITUTIONS	5,019	1,294	770	448	76	433	263	170	3,068	*	46	110	*	68
4-YR. COLL./UNIV.......	4,858	1,294	770	448	76	424	263	161	2,949	*	13	110	*	68
2-YR. COLLEGES.........	128	*	*	*	*	*	*	*	95	*	33	*	*	*
ELEM/SEC. SCHOOLS......	33	*	*	*	*	9	*	9	24	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	309	122	76	46	*	131	110	21	*	2	*	54	*	*
FEDERAL GOVT.............	2,060	1,242	643	557	42	659	487	172	9	2	65	80	*	3
MILITARY/COMM. CORPS.....	23	*	*	*	*	23	23	*	*	*	*	*	*	*
STATE GOVT...............	412	116	65	51	*	160	125	35	*	6	23	107	*	*
OTHER GOVT...............	54	12	*	*	12	13	*	13	*	6	*	23	*	*
OTHER....................	7	*	*	*	*	*	*	*	*	*	7	*	*	*
NOT EMPLOYED.............	484	*	*	*	*	*	*	*	*	*	*	*	484	*
NO REPORT................	24	*	*	*	*	*	*	*	*	*	*	*	*	24
OCEANOGRAPHERS														
TOTAL......................	1,818	1,028	792	224	12	445	345	100	182	53	20	36	36	18
BUSINESS/INDUSTRY........	184	76	42	22	12	39	39	*	*	53	1	15	*	*
EDUCATIONAL INSTITUTIONS	964	642	501	141	*	112	96	16	182	*	7	3	*	18
4-YR. COLL./UNIV.......	964	642	501	141	*	112	96	16	182	*	7	3	*	18
2-YR. COLLEGES.........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	86	86	79	7	*	*	*	*	*	*	*	*	*	*
FEDERAL GOVT.............	367	200	152	48	*	164	147	17	*	*	3	*	*	*
MILITARY/COMM. CORPS.....	29	6	6	*	*	23	23	*	*	*	*	*	*	*
STATE GOVT...............	137	18	12	6	*	98	31	67	*	*	9	12	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER....................	9	*	*	*	*	9	9	*	*	*	*	*	*	*
NOT EMPLOYED.............	36	*	*	*	*	*	*	*	*	*	*	*	36	*
NO REPORT................	6	*	*	*	*	*	*	*	*	*	*	6	*	*
ATMOSPHERIC SCIENTISTS														
TOTAL......................	2,166	1,217	759	438	20	460	385	75	334	65	2	41	40	7
BUSINESS/INDUSTRY........	391	182	61	119	2	139	83	56	*	53	*	17	*	*
EDUCATIONAL INSTITUTIONS	789	441	388	53	*	23	17	6	316	*	*	2	*	7
4-YR. COLL./UNIV.......	789	441	388	53	*	23	17	6	316	*	*	2	*	7
2-YR. COLLEGES.........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	228	191	115	76	*	31	31	*	*	6	*	*	*	*
FEDERAL GOVT.............	642	378	177	189	12	222	222	*	18	*	2	22	*	*
MILITARY/COMM. CORPS.....	63	13	12	1	*	44	31	13	*	6	*	*	*	*
STATE GOVT...............	13	12	6	*	6	1	1	*	*	*	*	*	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	40	*	*	*	*	*	*	*	*	*	*	*	40	*
NO REPORT................	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN					SALES/			
FIELD AND TYPE OF EMPLOYER	TOTAL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
ENGINEERS														
TOTAL.....................	58,311	23,380	2,777	10,730	9,873	15,193	10,302	4,891	10,744	3,818	1,366	2,282	1,358	170
BUSINESS/INDUSTRY........	31,659	16,122	706	6,499	8,917	8,990	6,698	2,292	133	3,436	1,085	1,852	*	41
EDUCATIONAL INSTITUTIONS	18,083	4,112	1,579	2,341	192	2,912	958	1,954	10,521	210	182	58	*	88
4-YR. COLL./UNIV.......	18,018	4,112	1,579	2,341	192	2,910	958	1,952	10,470	210	182	58	*	76
2-YR. COLLEGES.........	35	*	*	*	*	2	*	2	21	*	*	*	*	12
ELEM/SEC. SCHOOLS......	30	*	*	*	*	*	*	*	30	*	*	*	*	*
HOSPITALS/CLINICS........	18	4	*	4	*	7	*	7	*	7	*	*	*	*
NONPROFIT ORGS...........	2,338	1,307	87	931	289	850	775	75	8	65	29	68	*	11
FEDERAL GOVT.............	3,805	1,563	402	805	356	1,873	1,581	292	*	80	54	234	*	1
MILITARY/COMM. CORPS....	504	86	3	72	11	296	231	65	66	3	3	50	*	*
STATE GOVT...............	135	67	*	22	45	47	47	*	*	4	13	4	*	*
OTHER GOVT...............	222	95	*	56	39	84	12	72	16	13	*	14	*	*
OTHER....................	160	24	*	*	24	134	*	134	*	*	*	2	*	*
NOT EMPLOYED............	1,358	*	*	*	*	*	*	*	*	*	*	*	1,358	*
NO REPORT................	29	*	*	*	*	*	*	*	*	*	*	*	*	29
AERO/ASTRO ENGINEERS														
TOTAL.....................	2,536	1,076	175	588	313	838	620	218	387	40	84	50	18	43
BUSINESS/INDUSTRY........	1,126	531	*	262	269	469	298	171	*	40	46	40	*	*
EDUCATIONAL INSTITUTIONS	675	227	86	141	*	16	16	*	387	*	2	*	*	43
4-YR. COLL./UNIV.......	675	227	86	141	*	16	16	*	387	*	2	*	*	43
2-YR. COLLEGES.........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	176	82	*	82	*	94	93	1	*	*	*	*	*	*
FEDERAL GOVT.............	425	236	89	103	44	143	97	46	*	*	36	10	*	*
MILITARY/COMM. CORPS....	116	*	*	*	*	116	116	*	*	*	*	*	*	*
STATE GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED............	18	*	*	*	*	*	*	*	*	*	*	*	18	*
NO REPORT................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS														
TOTAL.....................	7,612	3,605	278	1,847	1,480	1,624	1,192	432	963	387	212	355	466	*
BUSINESS/INDUSTRY........	5,342	3,151	132	1,551	1,468	1,279	931	348	*	352	212	348	*	*
EDUCATIONAL INSTITUTIONS	1,380	297	142	155	*	85	1	84	963	35	*	*	*	*
4-YR. COLL./UNIV.......	1,380	297	142	155	*	85	1	84	963	35	*	*	*	*
2-YR. COLLEGES.........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	143	99	4	95	*	44	44	*	*	*	*	*	*	*
FEDERAL GOVT.............	258	58	*	46	12	193	193	*	*	*	*	7	*	*
MILITARY/COMM. CORPS....	*	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT...............	23	*	*	*	*	23	23	*	*	*	*	*	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED............	466	*	*	*	*	*	*	*	*	*	*	*	466	*
NO REPORT................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS														
TOTAL.....................	6,032	1,220	134	572	514	1,167	443	724	2,066	983	185	262	126	23
BUSINESS/INDUSTRY........	2,468	665	36	180	449	392	142	250	36	951	172	233	*	19
EDUCATIONAL INSTITUTIONS	2,789	402	91	311	*	400	96	304	1,970	*	*	17	*	*
4-YR. COLL./UNIV.......	2,786	402	91	311	*	400	96	304	1,967	*	*	17	*	*
2-YR. COLLEGES.........	3	*	*	*	*	*	*	*	3	*	*	*	*	*
ELEM/SEC. SCHOOLS......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	7	*	*	*	*	*	*	*	*	7	*	*	*	*
NONPROFIT ORGS...........	69	*	*	*	*	69	69	*	*	*	*	*	*	*
FEDERAL GOVT.............	147	30	7	23	*	101	96	5	*	8	*	8	*	*
MILITARY/COMM. CORPS....	131	58	*	58	*	29	6	23	44	*	*	*	*	*
STATE GOVT...............	88	43	*	*	43	24	24	*	*	4	13	4	*	*
OTHER GOVT...............	104	22	*	*	22	53	10	43	16	13	*	*	*	*
OTHER....................	99	*	*	*	*	99	*	99	*	*	*	*	*	*
NOT EMPLOYED............	126	*	*	*	*	*	*	*	*	*	*	*	126	*
NO REPORT................	4	*	*	*	*	*	*	*	*	*	*	*	*	4
ELEC./ELECTRON. ENGINEERS														
TOTAL.....................	10,834	4,405	273	1,703	2,429	2,999	2,163	836	2,316	377	242	314	164	17
BUSINESS/INDUSTRY........	6,189	3,295	55	1,135	2,105	2,073	1,652	421	16	311	210	284	*	*
EDUCATIONAL INSTITUTIONS	3,630	605	178	350	77	610	224	386	2,300	66	16	16	*	17
4-YR. COLL./UNIV.......	3,630	605	178	350	77	610	224	386	2,300	66	16	16	*	17
2-YR. COLLEGES.........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	264	202	2	131	69	46	46	*	*	*	16	*	*	*
FEDERAL GOVT.............	524	283	35	87	161	241	241	*	*	*	*	*	*	*
MILITARY/COMM. CORPS....	3	3	3	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT...............	60	17	*	*	17	29	*	29	*	*	*	14	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED............	164	*	*	*	*	*	*	*	*	*	*	*	164	*
NO REPORT................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS														
TOTAL.....................	6,238	3,035	633	1,665	737	1,652	1,206	446	820	260	96	266	109	*
BUSINESS/INDUSTRY........	4,067	2,325	148	1,442	735	1,196	1,035	161	2	242	80	222	*	*
EDUCATIONAL INSTITUTIONS	1,496	386	284	100	2	276	44	232	818	*	16	*	*	*
4-YR. COLL./UNIV.......	1,496	386	284	100	2	276	44	232	818	*	16	*	*	*
2-YR. COLLEGES.........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS......	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS...........	178	116	46	70	*	44	28	16	*	18	*	*	*	*
FEDERAL GOVT.............	388	208	155	53	*	136	99	37	*	*	*	44	*	*
MILITARY/COMM. CORPS....	*	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED............	109	*	*	*	*	*	*	*	*	*	*	*	109	*
NO REPORT................	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

BEST COPY AVAILABLE

FIELD AND TYPE OF EMPLOYER	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
MECHANICAL ENGINEERS														
TOTAL	5,577	2,234	344	875	1,015	1,039	660	379	1,502	378	132	86	206	*
BUSINESS/INDUSTRY	2,645	1,530	101	421	1,008	604	436	168	*	303	132	76	*	*
EDUCATIONAL INSTITUTIONS	2,139	415	219	189	7	178	2	176	1,502	44	*	*	*	*
4-YR. COLL./UNIV	2,136	415	219	189	7	178	2	176	1,499	44	*	*	*	*
2-YR. COLLEGES	3	*	*	*	*	*	*	*	3	*	*	*	*	*
ELEM/SEC. SCHOOLS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS	263	177	*	177	*	79	44	35	*	*	*	7	*	*
FEDERAL GOVT	322	112	24	88	*	176	176	*	*	31	*	3	*	*
MILITARY/COMM. CORPS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT	2	*	*	*	*	2	2	*	*	*	*	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	206	*	*	*	*	*	*	*	*	*	*	*	206	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS														
TOTAL	2,061	914	*	502	412	671	545	126	154	183	16	123	*	*
BUSINESS/INDUSTRY	1,057	457	*	135	322	320	254	66	23	183	*	74	*	*
EDUCATIONAL INSTITUTIONS	634	299	*	239	60	174	114	60	131	*	16	14	*	*
4-YR. COLL./UNIV	634	299	*	239	60	174	114	60	131	*	16	14	*	*
2-YR. COLLEGES	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS	242	80	*	72	8	162	162	*	*	*	*	*	*	*
FEDERAL GOVT	72	22	*	*	22	15	15	*	*	*	*	35	*	*
MILITARY/COMM. CORPS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT	56	56	*	56	*	*	*	*	*	*	*	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS														
TOTAL	5,366	2,436	127	653	1,656	1,535	1,101	434	567	467	143	190	17	11
BUSINESS/INDUSTRY	2,993	1,660	60	298	1,302	642	424	218	20	425	116	130	*	*
EDUCATIONAL INSTITUTIONS	992	298	67	195	36	139	42	97	547	8	*	*	*	*
4-YR. COLL./UNIV	992	298	67	195	36	139	42	97	547	8	*	*	*	*
2-YR. COLLEGES	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS	525	278	*	101	177	132	132	*	*	31	13	60	*	11
FEDERAL GOVT	702	141	*	37	104	550	443	107	*	*	11	*	*	*
MILITARY/COMM. CORPS	89	11	*	*	11	72	60	12	*	3	3	*	*	*
STATE GOVT	24	24	*	22	2	*	*	*	*	*	*	*	*	*
OTHER GOVT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	24	24	*	*	24	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	17	*	*	*	*	*	*	*	*	*	*	*	17	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS														
TOTAL	12,055	4,455	813	2,325	1,317	3,668	2,372	1,296	1,969	743	256	636	252	76
BUSINESS/INDUSTRY	5,772	2,508	174	1,075	1,259	2,015	1,526	489	36	629	117	445	*	22
EDUCATIONAL INSTITUTIONS	4,348	1,183	512	661	10	1,034	419	615	1,903	57	132	11	*	28
4-YR. COLL./UNIV	4,289	1,183	512	661	10	1,032	419	613	1,858	57	132	11	*	16
2-YR. COLLEGES	29	*	*	*	*	2	*	2	15	*	*	*	*	12
ELEM/SEC. SCHOOLS	30	*	*	*	*	*	*	*	30	*	*	*	*	*
HOSPITALS/CLINICS	11	4	*	4	*	7	*	7	*	*	*	*	*	*
NONPROFIT ORGS	478	273	35	203	35	180	157	23	8	16	*	1	*	*
FEDERAL GOVT	967	473	92	368	13	318	221	97	*	41	7	127	*	1
MILITARY/COMM. CORPS	165	14	*	14	*	79	49	30	22	*	*	50	*	*
STATE GOVT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	37	*	*	*	*	35	*	35	*	*	*	2	*	*
NOT EMPLOYED	252	*	*	*	*	*	*	*	*	*	*	*	252	*
NO REPORT	25	*	*	*	*	*	*	*	*	*	*	*	*	25
LIFE SCIENTISTS														
TOTAL	93,848	39,888	27,314	11,497	1,077	12,457	6,807	5,650	21,990	1,623	5,297	4,225	7,133	1,235
BUSINESS/INDUSTRY	13,473	4,348	1,225	2,454	669	3,956	3,306	650	65	1,168	2,150	1,462	*	324
EDUCATIONAL INSTITUTIONS	56,787	26,461	20,245	6,063	153	4,652	1,183	3,469	21,753	151	1,734	1,367	*	669
4-YR. COLL./UNIV	55,528	26,459	20,245	6,063	151	4,523	1,166	3,357	20,664	151	1,703	1,367	*	661
2-YR. COLLEGES	1,127	2	*	*	2	110	17	93	976	*	31	*	*	8
ELEM/SEC. SCHOOLS	132	*	*	*	*	19	*	19	113	*	*	*	*	*
HOSPITALS/CLINICS	2,974	1,225	1,042	167	16	420	107	313	33	111	857	308	*	20
NONPROFIT ORGS	3,165	1,945	1,626	261	58	810	502	308	31	43	69	242	*	25
FEDERAL GOVT	7,590	5,131	2,807	2,199	125	1,709	1,338	371	38	64	199	425	*	24
MILITARY/COMM. CORPS	764	229	152	77	*	189	124	65	57	20	143	126	*	*
STATE GOVT	1,265	479	203	246	30	400	131	269	13	57	83	218	*	15
OTHER GOVT	378	43	7	30	6	235	44	191	*	7	62	31	*	*
OTHER	152	20	*	*	20	86	72	14	*	*	*	46	*	*
NOT EMPLOYED	7,133	*	*	*	*	*	*	*	*	*	*	*	7,133	*
NO REPORT	167	7	7	*	*	*	*	*	*	2	*	*	*	158
BIOLOGICAL SCIENTISTS														
TOTAL	54,442	25,647	21,332	3,853	462	5,036	2,786	2,250	15,217	751	948	1,450	4,769	624
BUSINESS/INDUSTRY	5,330	2,291	848	1,135	308	1,533	1,397	136	27	503	344	518	*	114
EDUCATIONAL INSTITUTIONS	35,840	17,411	15,855	1,512	44	2,035	384	1,651	15,131	117	395	364	*	387
4-YR. COLL./UNIV	34,828	17,411	15,855	1,512	44	1,961	377	1,584	14,223	117	373	364	*	379
2-YR. COLLEGES	909	*	*	*	*	55	7	48	824	*	22	*	*	8
ELEM/SEC. SCHOOLS	103	*	*	*	*	19	*	19	84	*	*	*	*	*
HOSPITALS/CLINICS	1,181	853	746	107	*	127	52	75	7	40	67	87	*	*
NONPROFIT ORGS	2,272	1,614	1,455	101	58	413	236	177	17	18	14	171	*	25
FEDERAL GOVT	4,156	3,181	2,216	925	40	735	650	85	21	26	75	104	*	14
MILITARY/COMM. CORPS	200	109	96	13	*	27	20	7	7	*	30	27	*	*
STATE GOVT	481	165	102	51	12	83	13	70	7	47	14	165	*	*
OTHER GOVT	88	16	7	9	*	49	*	49	*	*	9	14	*	*
OTHER	34	*	*	*	*	34	34	*	*	*	*	*	*	*
NOT EMPLOYED	4,769	*	*	*	*	*	*	*	*	*	*	*	4,769	*
NO REPORT	91	7	7	*	*	*	*	*	*	*	*	*	*	84

* NO CASES REPORTED

BEST COPY AVAILABLE

FIELD AND TYPE OF EMPLOYER	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
AGRICULTURAL SCIENTISTS														
TOTAL	17,270	6,732	1,556	4,975	201	3,348	1,924	1,424	2,997	407	715	1,342	1,391	338
BUSINESS/INDUSTRY	3,450	792	155	524	113	1,098	763	335	19	389	433	567	*	152
EDUCATIONAL INSTITUTIONS	9,147	4,137	974	3,117	46	1,213	405	808	2,966	*	222	473	*	136
4-YR. COLL./UNIV	8,974	4,137	974	3,117	46	1,175	395	780	2,840	*	213	473	*	136
2-YR. COLLEGES	151	*	*	*	*	38	10	28	104	*	9	*	*	*
ELEM/SEC. SCHOOLS	22	*	*	*	*	*	*	*	22	*	*	*	*	*
HOSPITALS/CLINICS	3	*	*	*	*	3	*	3	*	*	*	*	*	*
NONPROFIT ORGS	284	38	12	26	*	204	136	68	12	11	*	19	*	*
FEDERAL GOVT	2,435	1,564	377	1,147	40	632	451	181	*	7	19	213	*	*
MILITARY/COMM. CORPS	9	2	2	*	*	7	7	*	*	*	*	*	*	*
STATE GOVT	393	199	36	161	2	114	85	29	*	*	41	24	*	15
OTHER GOVT	39	*	*	*	*	39	39	*	*	*	*	*	*	*
OTHER	84	*	*	*	*	38	38	*	*	*	*	46	*	*
NOT EMPLOYED	1,391	*	*	*	*	*	*	*	*	*	*	*	1,391	*
NO REPORT	35	*	*	*	*	*	*	*	*	*	*	*	*	35
MEDICAL SCIENTISTS														
TOTAL	22,136	7,509	4,426	2,669	414	4,073	2,097	1,976	3,776	465	3,634	1,433	973	273
BUSINESS/INDUSTRY	4,693	1,265	222	795	248	1,325	1,146	179	19	276	1,373	377	*	58
EDUCATIONAL INSTITUTIONS	11,800	4,913	3,416	1,434	63	1,404	394	1,010	3,656	34	1,117	530	*	146
4-YR. COLL./UNIV	11,726	4,911	3,416	1,434	61	1,387	394	993	3,601	34	1,117	530	*	146
2-YR. COLLEGES	67	2	*	*	2	17	*	17	48	*	*	*	*	*
ELEM/SEC. SCHOOLS	7	*	*	*	*	*	*	*	7	*	*	*	*	*
HOSPITALS/CLINICS	1,790	372	296	60	16	290	55	235	26	71	790	221	*	20
NONPROFIT ORGS	609	293	159	134	*	193	130	63	2	14	55	52	*	*
FEDERAL GOVT	999	386	214	127	45	342	237	105	17	31	105	108	*	10
MILITARY/COMM. CORPS	555	118	54	64	*	155	97	58	50	20	113	99	*	*
STATE GOVT	391	115	65	34	16	203	33	170	6	10	28	29	*	*
OTHER GOVT	251	27	*	21	6	147	5	142	*	7	53	17	*	*
OTHER	34	20	*	*	20	14	*	14	*	*	*	*	*	*
NOT EMPLOYED	973	*	*	*	*	*	*	*	*	*	*	*	973	*
NO REPORT	41	*	*	*	*	*	*	*	*	2	*	*	*	39
PSYCHOLOGISTS														
TOTAL	45,416	5,383	2,461	2,518	404	5,853	1,062	4,791	12,563	2,051	15,168	1,512	2,352	534
BUSINESS/INDUSTRY	10,145	1,029	60	726	243	627	155	472	76	1,171	6,336	655	*	251
EDUCATIONAL INSTITUTIONS	21,833	3,289	2,101	1,159	29	2,657	293	2,364	12,353	331	2,515	514	*	174
4-YR. COLL./UNIV	19,195	3,246	2,092	1,128	26	2,076	284	1,792	11,706	119	1,537	408	*	103
2-YR. COLLEGES	987	12	6	6	*	174	*	174	574	69	104	36	*	18
ELEM/SEC. SCHOOLS	1,651	31	3	25	3	407	9	398	73	143	874	70	*	53
HOSPITALS/CLINICS	6,194	251	118	97	36	947	76	871	104	178	4,516	148	*	50
NONPROFIT ORGS	1,693	231	55	131	45	570	168	402	10	136	662	84	*	*
FEDERAL GOVT	1,211	448	88	360	*	467	302	165	2	38	222	25	*	9
MILITARY/COMM. CORPS	221	6	*	6	*	13	*	13	*	*	168	34	*	*
STATE GOVT	982	103	39	39	25	380	68	312	18	159	312	7	*	3
OTHER GOVT	733	26	*	*	26	192	*	192	*	33	437	45	*	*
OTHER	5	*	*	*	*	*	*	*	*	5	*	*	*	*
NOT EMPLOYED	2,352	*	*	*	*	*	*	*	*	*	*	*	2,352	*
NO REPORT	47	*	*	*	*	*	*	*	*	*	*	*	*	47
SOCIAL SCIENTISTS														
TOTAL	56,473	7,553	3,155	4,153	245	8,284	2,266	6,018	29,285	1,358	1,534	3,868	3,527	1,064
BUSINESS/INDUSTRY	4,721	1,153	116	881	156	894	470	424	16	931	713	875	*	139
EDUCATIONAL INSTITUTIONS	39,252	3,779	2,443	1,299	37	4,267	602	3,665	29,163	146	234	1,100	*	563
4-YR. COLL./UNIV	37,513	3,730	2,399	1,294	37	3,911	596	3,315	27,949	146	182	1,036	*	559
2-YR. COLLEGES	1,245	23	23	*	*	172	3	169	992	*	30	24	*	4
ELEM/SEC. SCHOOLS	494	26	21	5	*	184	3	181	222	*	22	40	*	*
HOSPITALS/CLINICS	138	6	*	6	*	52	5	47	3	*	75	2	*	*
NONPROFIT ORGS	2,152	609	243	356	10	889	437	452	5	93	217	291	*	48
FEDERAL GOVT	3,862	1,251	275	974	2	1,287	555	732	39	96	133	1,021	*	35
MILITARY/COMM. CORPS	232	*	*	*	*	119	9	110	44	*	*	69	*	*
STATE GOVT	1,202	358	78	272	8	544	96	448	*	35	56	209	*	*
OTHER GOVT	477	103	*	71	32	141	26	115	3	4	106	113	*	7
OTHER	665	291	*	291	*	91	66	25	9	53	*	186	*	15
NOT EMPLOYED	3,527	*	*	*	*	*	*	*	*	*	*	*	3,527	*
NO REPORT	265	3	*	3	*	*	*	*	3	*	*	2	*	257
ECONOMISTS														
TOTAL	14,294	2,972	778	2,171	23	1,815	628	1,187	6,769	615	283	787	868	185
BUSINESS/INDUSTRY	2,161	668	78	569	21	514	310	204	5	521	206	189	*	58
EDUCATIONAL INSTITUTIONS	9,017	1,068	525	543	*	839	143	696	6,755	*	63	183	*	109
4-YR. COLL./UNIV	8,814	1,063	525	538	*	839	143	696	6,585	*	35	183	*	109
2-YR. COLLEGES	198	*	*	*	*	*	*	*	170	*	28	*	*	*
ELEM/SEC. SCHOOLS	5	5	*	5	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS	331	203	31	172	*	119	66	53	*	*	2	7	*	*
FEDERAL GOVT	1,258	650	131	517	2	320	109	211	*	6	*	267	*	15
MILITARY/COMM. CORPS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT	121	74	13	61	*	*	*	*	*	35	12	*	*	*
OTHER GOVT	15	15	*	15	*	*	*	*	*	*	*	*	*	*
OTHER	517	291	*	291	*	23	*	23	9	53	*	141	*	*
NOT EMPLOYED	868	*	*	*	*	*	*	*	*	*	*	*	868	*
NO REPORT	6	3	*	3	*	*	*	*	*	*	*	*	*	3
SOCIOLOGISTS/ANTHRO.														
TOTAL	11,909	1,821	1,006	809	6	1,288	349	939	6,859	18	255	480	911	277
BUSINESS/INDUSTRY	487	60	4	56	*	64	*	64	5	12	159	162	*	25
EDUCATIONAL INSTITUTIONS	9,285	1,257	841	414	2	774	65	709	6,846	6	35	177	*	190
4-YR. COLL./UNIV	8,957	1,236	820	414	2	709	62	647	6,610	6	29	177	*	190
2-YR. COLLEGES	298	*	*	*	*	62	*	62	236	*	*	*	*	*
ELEM/SEC. SCHOOLS	30	21	21	*	*	3	3	*	*	*	6	*	*	*
HOSPITALS/CLINICS	96	6	*	6	*	32	5	27	*	*	58	*	*	*
NONPROFIT ORGS	534	199	99	96	4	259	158	101	5	*	3	68	*	*
FEDERAL GOVT	301	227	57	170	*	40	40	*	*	*	*	34	*	*
MILITARY/COMM. CORPS	9	*	*	*	*	9	9	*	*	*	*	*	*	*
STATE GOVT	203	72	5	67	*	92	54	38	*	*	*	39	*	*
OTHER GOVT	18	*	*	*	*	18	18	*	*	*	*	*	*	*
OTHER	15	*	*	*	*	*	*	*	*	*	*	*	*	15
NOT EMPLOYED	911	*	*	*	*	*	*	*	*	*	*	*	911	*
NO REPORT	50	*	*	*	*	*	*	*	3	*	*	*	*	47

* NO CASES REPORTED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN					SALES/			
			BASIC	APPL'D						CON-	PROF.		NOT	
			RE-	RE-	DEVEL-		OF	OF	TEACH-	SULT-	SER-		EM-	NO
FIELD AND TYPE OF EMPLOYER	TOTAL	TOTAL	SEARCH	SEARCH	OPMENT	TOTAL	R&D	OTHER	ING	ING	VICES	OTHER	PLOYED	REPORT
OTHER SOCIAL SCIENTISTS														
TOTAL......................	30,270	2,760	1,371	1,173	216	5,181	1,289	3,892	15,657	725	996	2,601	1,748	602
BUSINESS/INDUSTRY........	2,073	425	34	256	135	316	160	156	6	398	348	524	*	56
EDUCATIONAL INSTITUTIONS	20,950	1,454	1,077	342	35	2,654	394	2,260	15,562	140	136	740	*	264
4-YR. COLL./UNIV.......	19,742	1,431	1,054	342	35	2,363	391	1,972	14,754	140	118	676	*	260
2-YR. COLLEGES.........	749	23	23	*	*	110	3	107	586	*	2	24	*	4
ELEM/SEC. SCHOOLS......	459	*	*	*	*	181	*	181	222	*	16	40	*	*
HOSPITALS/CLINICS........	42	*	*	*	*	20	*	20	3	*	17	2	*	*
NONPROFIT ORGS............	1,287	207	113	88	6	511	213	298	*	93	212	216	*	48
FEDERAL GOVT..............	2,303	374	87	287	*	927	406	521	39	90	133	720	*	20
MILITARY/COMM. CORPS....	223	*	*	*	*	110	*	110	44	*	*	69	*	*
STATE GOVT................	878	212	60	144	8	452	42	410	*	*	44	170	*	*
OTHER GOVT................	444	88	*	56	32	123	8	115	3	4	106	113	*	7
OTHER.....................	113	*	*	*	*	68	66	2	*	*	*	45	*	*
NOT EMPLOYED..............	1,748	*	*	*	*	*	*	*	*	*	*	*	1,748	*
NO REPORT.................	209	*	*	*	*	*	*	*	*	*	*	2	*	207

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
ALL FIELDS															
TOTAL	363,866	99,020	186,809	179,010	5,035	2,764	9,862	12,581	25,087	2,052	4,454	2,068	992	20,328	613
1 OR LESS YEARS	5,226	1,420	2,521	2,515	4	2	149	123	156	3	39	5	*	796	14
2-4 YEARS	28,389	7,700	14,825	14,412	205	208	1,289	1,446	1,214	111	258	316	58	1,165	7
5-9 YEARS	60,680	18,396	29,941	28,763	751	427	2,597	2,365	3,558	446	1,061	417	111	1,680	108
10-14 YEARS	64,101	19,085	32,395	30,657	1,193	545	1,576	2,323	5,361	338	871	485	343	1,158	166
15-19 YEARS	43,322	11,832	23,292	22,205	692	395	871	1,545	3,830	480	501	112	202	566	91
20-24 YEARS	33,476	8,838	18,161	17,253	594	294	608	844	3,112	286	502	137	26	933	49
25-29 YEARS	26,422	6,325	14,337	13,798	314	225	585	945	2,001	148	350	221	133	1,306	71
30-34 YEARS	21,712	5,118	11,539	11,143	212	184	396	564	1,545	44	193	50	*	2,237	26
35-39 YEARS	11,363	2,524	4,713	4,575	120	18	144	597	822	2	51	80	8	2,400	2
40 OR MORE YEARS	10,585	2,278	3,473	3,356	76	41	52	307	477	*	14	33	*	3,907	44
NO REPORT	58,610	15,504	31,632	30,333	874	425	1,595	1,522	3,011	194	614	212	111	4,180	35
PHYSICAL SCIENTISTS															
TOTAL	67,693	27,401	28,333	26,897	1,162	274	518	2,071	4,343	136	258	100	*	4,504	29
1 OR LESS YEARS	1,103	548	394	390	4	*	*	7	19	3	3	1	*	128	*
2-4 YEARS	5,299	2,482	2,001	1,981	18	2	61	275	203	19	38	35	*	185	*
5-9 YEARS	9,775	4,624	3,799	3,534	187	78	76	621	486	57	52	17	*	239	4
10-14 YEARS	11,307	4,697	4,911	4,526	334	51	131	386	921	28	40	37	*	156	*
15-19 YEARS	8,085	3,131	3,724	3,552	136	36	54	208	761	29	25	*	*	136	17
20-24 YEARS	6,824	2,580	3,265	3,136	120	9	18	181	587	*	24	10	*	153	6
25-29 YEARS	5,551	2,316	2,407	2,324	42	41	20	60	344	*	43	*	*	359	2
30-34 YEARS	3,957	1,654	1,504	1,475	25	4	49	124	203	*	*	*	*	423	*
35-39 YEARS	2,898	878	939	930	9	*	6	142	203	*	*	*	*	730	*
40 OR MORE YEARS	3,105	909	826	777	33	16	*	63	132	*	*	*	*	1,173	*
NO REPORT	9,791	3,582	4,563	4,272	254	37	103	204	484	*	33	*	*	822	*
CHEMISTS															
TOTAL	45,376	22,250	15,772	14,621	923	228	405	1,033	2,131	65	203	100	*	3,405	12
1 OR LESS YEARS	755	476	214	212	2	*	*	7	2	*	3	1	*	52	*
2-4 YEARS	3,661	1,987	1,190	1,183	5	2	44	153	104	2	38	35	*	108	*
5-9 YEARS	6,488	3,636	2,110	1,906	153	51	63	176	253	34	48	17	*	147	4
10-14 YEARS	6,937	3,552	2,535	2,195	290	50	107	154	376	*	40	37	*	136	*
15-19 YEARS	5,108	2,559	2,068	1,937	95	36	52	106	207	29	1	*	*	86	*
20-24 YEARS	4,563	2,243	1,756	1,666	81	9	18	74	337	*	*	10	*	119	6
25-29 YEARS	3,931	1,969	1,347	1,266	40	41	20	45	218	*	43	*	*	287	2
30-34 YEARS	2,707	1,385	781	765	12	4	11	111	150	*	*	*	*	269	*
35-39 YEARS	2,155	807	585	576	9	*	6	87	106	*	*	*	*	564	*
40 OR MORE YEARS	2,437	766	551	518	33	*	*	50	80	*	*	*	*	990	*
NO REPORT	6,634	2,870	2,635	2,397	203	35	84	70	298	*	30	*	*	647	*
PHYSICISTS/ASTRONOMERS															
TOTAL	22,317	5,151	12,561	12,276	239	46	113	1,038	2,212	71	55	*	*	1,099	17
1 OR LESS YEARS	348	72	180	178	2	*	*	*	17	3	*	*	*	76	*
2-4 YEARS	1,638	495	811	798	13	*	17	122	99	17	*	*	*	77	*
5-9 YEARS	3,287	980	1,689	1,628	36	27	13	245	233	23	4	*	*	92	*
10-14 YEARS	4,370	1,145	2,376	2,331	44	1	24	232	545	28	*	*	*	20	*
15-19 YEARS	2,977	572	1,656	1,615	41	*	2	102	554	*	24	*	*	50	17
20-24 YEARS	2,261	337	1,509	1,470	39	*	*	107	250	*	24	*	*	34	*
25-29 YEARS	1,620	347	1,060	1,058	2	*	*	15	126	*	*	*	*	72	*
30-34 YEARS	1,250	269	723	710	13	*	38	13	53	*	*	*	*	154	*
35-39 YEARS	743	71	354	354	*	*	*	55	97	*	*	*	*	166	*
40 OR MORE YEARS	666	143	275	259	*	16	*	13	52	*	*	*	*	183	*
NO REPORT	3,157	712	1,928	1,875	51	2	19	134	186	*	3	*	*	175	*
MATHEMATICAL SCIENTISTS															
TOTAL	16,470	1,621	12,739	12,294	302	143	*	263	852	57	2	*	14	876	46
1 OR LESS YEARS	162	11	131	131	*	*	*	*	*	*	*	*	*	20	*
2-4 YEARS	1,120	110	917	873	41	3	*	*	10	*	*	*	*	83	*
5-9 YEARS	2,301	467	1,561	1,451	80	30	*	36	191	*	*	*	*	44	2
10-14 YEARS	2,755	253	2,218	2,123	48	47	*	47	172	*	*	*	*	65	*
15-19 YEARS	2,453	186	2,118	2,084	32	2	*	23	63	20	*	*	*	14	29
20-24 YEARS	1,591	151	1,261	1,225	22	14	*	42	94	37	*	*	*	6	*
25-29 YEARS	1,210	73	988	970	16	2	*	30	79	*	*	*	*	32	8
30-34 YEARS	785	69	595	579	14	2	*	11	43	*	2	*	*	65	*
35-39 YEARS	471	21	306	305	1	*	*	8	10	*	*	*	*	126	*
40 OR MORE YEARS	526	70	238	234	2	2	*	31	*	*	*	*	*	187	*
NO REPORT	3,096	210	2,406	2,319	46	41	*	35	190	*	*	*	14	234	7
MATHEMATICIANS															
TOTAL	13,819	1,159	11,007	10,564	300	143	*	226	553	57	2	*	*	781	36
1 OR LESS YEARS	137	9	112	112	*	*	*	*	*	*	*	*	*	16	*
2-4 YEARS	951	96	775	731	41	3	*	*	*	*	*	*	*	80	*
5-9 YEARS	1,729	313	1,246	1,136	80	30	*	13	118	*	*	*	*	39	*
10-14 YEARS	2,349	169	1,967	1,872	48	47	*	47	103	*	*	*	*	63	*
15-19 YEARS	2,092	148	1,823	1,789	32	2	*	23	35	20	*	*	*	14	29
20-24 YEARS	1,313	102	1,071	1,035	22	14	*	28	69	37	*	*	*	6	*
25-29 YEARS	992	45	843	827	14	2	*	30	42	*	*	*	*	32	*
30-34 YEARS	667	50	517	501	14	2	*	9	43	*	2	*	*	46	*
35-39 YEARS	369	8	252	251	1	*	*	8	*	*	*	*	*	101	*
40 OR MORE YEARS	416	55	175	171	2	2	*	31	*	*	*	*	*	155	*
NO REPORT	2,804	164	2,226	2,139	46	41	*	35	143	*	*	*	*	229	7
STATISTICIANS															
TOTAL	2,651	462	1,732	1,730	2	*	*	39	299	*	*	*	14	95	10
1 OR LESS YEARS	25	2	19	19	*	*	*	*	*	*	*	*	*	4	*
2-4 YEARS	169	14	142	142	*	*	*	*	10	*	*	*	*	3	*
5-9 YEARS	572	154	315	315	*	*	*	23	73	*	*	*	*	5	2
10-14 YEARS	406	84	251	251	*	*	*	*	69	*	*	*	*	2	*
15-19 YEARS	361	38	295	295	*	*	*	*	28	*	*	*	*	*	*
20-24 YEARS	278	49	190	190	*	*	*	14	25	*	*	*	*	*	*
25-29 YEARS	218	28	145	143	2	*	*	*	37	*	*	*	*	*	8
30-34 YEARS	118	19	78	78	*	*	*	2	*	*	*	*	*	19	*
35-39 YEARS	102	13	54	54	*	*	*	*	10	*	*	*	*	25	*
40 OR MORE YEARS	110	15	63	63	*	*	*	*	*	*	*	*	*	32	*
NO REPORT	292	46	180	180	*	*	*	*	47	*	*	*	14	5	*

* NO CASES REPORTED

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FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
COMPUTER SPECIALISTS															
TOTAL......................	9,066	5,212	3,010	2,954	49	7	20	276	355	23	48	104	*	18	*
1 OR LESS YEARS.........	98	88	10	10	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS..............	670	335	323	323	*	*	*	*	*	3	*	*	*	9	*
5-9 YEARS..............	2,132	1,370	666	627	32	7	*	60	18	*	4	7	*	7	*
10-14 YEARS.............	2,232	1,303	602	602	*	*	*	82	125	3	44	73	*	*	*
15-19 YEARS.............	1,114	513	373	373	*	*	*	85	103	14	*	24	*	2	*
20-24 YEARS.............	462	259	176	159	17	*	*	*	24	3	*	*	*	*	*
25-29 YEARS.............	439	195	137	137	*	*	*	36	71	*	*	*	*	*	*
30-34 YEARS.............	378	148	230	230	*	*	*	*	*	*	*	*	*	*	*
35-39 YEARS.............	100	79	14	14	*	*	*	*	7	*	*	*	*	*	*
40 OR MORE YEARS.......	52	42	10	10	*	*	*	*	*	*	*	*	*	*	*
NO REPORT...............	1,389	880	469	469	*	*	20	13	7	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS															
TOTAL......................	16,589	4,788	6,772	6,611	128	33	*	623	3,069	115	562	54	16	560	30
1 OR LESS YEARS.........	284	71	140	140	*	*	*	14	27	*	*	*	*	32	*
2-4 YEARS..............	1,253	385	595	584	11	*	*	34	164	*	47	12	*	16	*
5-9 YEARS..............	2,889	964	1,120	1,106	14	*	*	108	449	24	183	*	9	32	*
10-14 YEARS.............	2,862	904	1,060	1,036	18	6	*	154	510	13	158	14	7	33	9
15-19 YEARS.............	2,341	605	936	913	14	9	*	113	610	35	17	*	*	25	*
20-24 YEARS.............	1,677	426	678	619	50	9	*	34	372	36	54	6	*	71	*
25-29 YEARS.............	996	280	435	432	3	*	*	14	238	*	6	*	*	23	*
30-34 YEARS.............	1,101	302	484	478	6	*	*	7	235	*	8	*	*	59	6
35-39 YEARS.............	468	84	141	140	1	*	*	48	106	*	37	6	*	44	2
40 OR MORE YEARS.......	558	178	123	123	*	*	*	13	72	*	*	*	*	159	13
NO REPORT...............	2,160	589	1,060	1,040	11	9	*	84	286	7	52	16	*	66	*
EARTH SCIENTISTS															
TOTAL......................	12,605	4,213	5,019	4,858	128	33	*	309	2,060	23	412	54	7	484	24
1 OR LESS YEARS.........	202	69	73	73	*	*	*	1	27	*	*	*	*	32	*
2-4 YEARS..............	858	317	373	362	11	*	*	17	114	*	12	12	*	13	*
5-9 YEARS..............	1,810	828	537	523	14	*	*	46	275	*	102	*	*	22	*
10-14 YEARS.............	2,060	708	801	777	18	6	*	85	273	*	146	14	7	25	9
15-19 YEARS.............	1,793	523	809	786	14	9	*	65	380	*	9	*	*	7	*
20-24 YEARS.............	1,440	426	540	481	50	9	*	27	302	23	45	6	*	71	*
25-29 YEARS.............	821	262	350	347	3	*	*	6	174	*	6	*	*	23	*
30-34 YEARS.............	881	259	401	395	6	*	*	*	149	*	7	*	*	59	6
35-39 YEARS.............	415	84	104	103	1	*	*	34	104	*	37	6	*	44	2
40 OR MORE YEARS.......	467	164	89	89	*	*	*	13	66	*	*	*	*	128	7
NO REPORT...............	1,850	573	942	922	11	9	*	15	196	*	48	16	*	60	*
OCEANOGRAPHERS															
TOTAL......................	1,818	184	964	964	*	*	*	86	367	29	137	*	9	36	6
1 OR LESS YEARS.........	20	2	18	18	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS..............	142	24	75	75	*	*	*	*	12	*	31	*	*	*	*
5-9 YEARS..............	606	47	355	355	*	*	*	41	63	*	81	*	9	10	*
10-14 YEARS.............	410	85	190	190	*	*	*	23	104	*	6	*	*	2	*
15-19 YEARS.............	185	5	79	79	*	*	*	11	44	29	8	*	*	9	*
20-24 YEARS.............	105	*	70	70	*	*	*	*	26	*	9	*	*	*	*
25-29 YEARS.............	70	*	29	29	*	*	*	*	41	*	*	*	*	*	*
30-34 YEARS.............	55	7	29	29	*	*	*	7	12	*	*	*	*	*	*
35-39 YEARS.............	21	*	21	21	*	*	*	*	*	*	*	*	*	*	*
40 OR MORE YEARS.......	48	14	7	7	*	*	*	*	6	*	*	*	*	15	6
NO REPORT...............	156	*	91	91	*	*	*	4	59	*	2	*	*	*	*
ATMOSPHERIC SCIENTISTS															
TOTAL......................	2,166	391	789	789	*	*	*	228	642	63	13	*	*	40	*
1 OR LESS YEARS.........	62	*	49	49	*	*	*	13	*	*	*	*	*	*	*
2-4 YEARS..............	253	44	147	147	*	*	*	17	38	*	4	*	*	3	*
5-9 YEARS..............	473	89	228	228	*	*	*	21	111	24	*	*	*	*	*
10-14 YEARS.............	384	111	69	69	*	*	*	46	133	13	6	*	*	6	*
15-19 YEARS.............	363	77	48	48	*	*	*	37	186	6	*	*	*	9	*
20-24 YEARS.............	132	*	68	68	*	*	*	7	44	13	*	*	*	*	*
25-29 YEARS.............	105	18	56	56	*	*	*	8	23	*	*	*	*	*	*
30-34 YEARS.............	165	36	54	54	*	*	*	*	74	*	1	*	*	*	*
35-39 YEARS.............	32	*	16	16	*	*	*	14	2	*	*	*	*	*	*
40 OR MORE YEARS.......	43	*	27	27	*	*	*	*	*	*	*	*	*	16	*
NO REPORT...............	154	16	27	27	*	*	*	65	31	7	2	*	*	6	*
ENGINEERS															
TOTAL......................	58,311	31,659	18,083	18,018	35	30	18	2,338	3,805	504	135	222	160	1,338	29
1 OR LESS YEARS.........	513	387	121	121	*	*	*	*	2	*	*	*	*	3	*
2-4 YEARS..............	3,292	2,035	871	871	*	*	*	284	46	*	*	56	*	*	*
5-9 YEARS..............	8,023	5,244	1,886	1,886	*	*	11	386	320	44	73	22	2	10	25
10-14 YEARS.............	10,856	6,938	2,454	2,454	*	*	*	354	869	104	17	8	*	112	*
15-19 YEARS.............	8,039	4,298	2,459	2,457	2	*	7	302	609	197	2	29	123	13	*
20-24 YEARS.............	6,946	3,637	2,466	2,466	*	*	*	93	566	96	43	12	*	29	4
25-29 YEARS.............	4,527	1,785	1,968	1,923	15	30	*	305	297	44	*	52	35	41	*
30-34 YEARS.............	3,972	1,469	1,652	1,652	*	*	*	230	271	17	*	*	*	333	*
35-39 YEARS.............	1,895	714	659	659	*	*	*	101	172	*	*	27	*	222	*
40 OR MORE YEARS.......	1,328	363	456	456	*	*	*	50	124	*	*	16	*	319	*
NO REPORT...............	8,920	4,789	3,091	3,073	18	*	*	233	529	2	*	*	*	276	*
AERO/ASTRO ENGINEERS															
TOTAL......................	2,536	1,126	675	675	*	*	*	176	425	116	*	*	*	18	*
1 OR LESS YEARS.........	41	41	*	*	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS..............	132	5	94	94	*	*	*	31	2	*	*	*	*	*	*
5-9 YEARS..............	216	163	*	*	*	*	*	5	48	*	*	*	*	*	*
10-14 YEARS.............	448	253	103	103	*	*	*	*	68	24	*	*	*	*	*
15-19 YEARS.............	580	186	173	173	*	*	*	49	123	49	*	*	*	*	*
20-24 YEARS.............	329	107	108	108	*	*	*	*	69	43	*	*	*	2	*
25-29 YEARS.............	209	65	37	37	*	*	*	91	36	*	*	*	*	*	*
30-34 YEARS.............	151	98	37	37	*	*	*	*	*	*	*	*	*	16	*
35-39 YEARS.............	85	50	35	35	*	*	*	*	*	*	*	*	*	*	*
40 OR MORE YEARS.......	17	17	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT...............	328	161	88	88	*	*	*	*	79	*	*	*	*	*	*

* NO CASES REPORTED

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			EDUCATIONAL INSTITUTIONS												
FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	BUSINESS/INDUSTRY	TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL	HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
CHEMICAL ENGINEERS															
TOTAL....................	7,612	5,342	1,380	1,380	*	*	*	143	258	*	23	*	*	466	*
1 OR LESS YEARS........	181	181	*	*	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS...............	618	353	165	165	*	*	*	87	13	*	*	*	*	*	*
5-9 YEARS...............	1,191	1,002	136	136	*	*	*	5	24	*	23	*	*	1	*
10-14 YEARS.............	1,358	1,069	204	204	*	*	*	7	76	*	*	*	*	2	*
15-19 YEARS.............	668	568	93	93	*	*	*	*	7	*	*	*	*	*	*
20-24 YEARS.............	942	767	140	140	*	*	*	*	35	*	*	*	*	*	*
25-29 YEARS.............	649	400	232	232	*	*	*	*	17	*	*	*	*	*	*
30-34 YEARS.............	493	257	96	96	*	*	*	*	24	*	*	*	*	116	*
35-39 YEARS.............	322	126	16	16	*	*	*	*	16	*	*	*	*	164	*
40 OR MORE YEARS.......	113	48	17	17	*	*	*	*	*	*	*	*	*	48	*
NO REPORT...............	1,077	571	281	281	*	*	*	44	46	*	*	*	*	135	*
CIVIL ENGINEERS															
TOTAL....................	6,032	2,468	2,789	2,786	3	*	7	69	147	131	88	104	99	126	4
1 OR LESS YEARS........	23	21	*	*	*	*	*	*	2	*	*	*	*	*	*
2-4 YEARS...............	77	64	13	13	*	*	*	*	*	*	*	*	*	*	*
5-9 YEARS...............	974	389	485	485	*	*	7	*	4	41	26	22	*	*	*
10-14 YEARS.............	1,178	738	380	380	*	*	*	23	12	*	17	8	*	*	*
15-19 YEARS.............	830	316	295	295	*	*	*	46	49	23	2	*	99	*	*
20-24 YEARS.............	725	215	417	417	*	*	*	*	14	6	43	10	*	16	4
25-29 YEARS.............	601	146	376	376	*	*	*	*	*	44	*	35	*	*	*
30-34 YEARS.............	386	125	166	166	*	*	*	*	43	17	*	*	*	35	*
35-39 YEARS.............	150	51	51	51	*	*	*	*	*	*	*	13	*	35	*
40 OR MORE YEARS.......	182	63	48	48	*	*	*	*	15	*	*	16	*	40	*
NO REPORT...............	906	340	558	555	3	*	*	*	8	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS															
TOTAL....................	10,834	6,189	3,630	3,630	*	*	*	264	524	3	*	60	*	164	*
1 OR LESS YEARS........	80	34	46	46	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS...............	658	514	141	141	*	*	*	3	*	*	*	*	*	*	*
5-9 YEARS...............	1,428	955	308	308	*	*	*	134	31	*	*	*	*	*	*
10-14 YEARS.............	1,944	1,176	498	498	*	*	*	44	226	*	*	*	*	*	*
15-19 YEARS.............	1,464	891	428	428	*	*	*	53	63	*	*	29	*	*	*
20-24 YEARS.............	1,376	593	668	668	*	*	*	1	111	3	*	*	*	*	*
25-29 YEARS.............	613	338	245	245	*	*	*	13	*	*	*	17	*	*	*
30-34 YEARS.............	767	292	460	460	*	*	*	*	15	*	*	*	*	*	*
35-39 YEARS.............	299	68	187	187	*	*	*	16	14	*	*	14	*	*	*
40 OR MORE YEARS.......	178	34	38	38	*	*	*	*	29	*	*	*	*	77	*
NO REPORT...............	2,027	1,294	611	611	*	*	*	*	35	*	*	*	*	87	*
MATERIALS SCI. ENGINEERS															
TOTAL....................	6,238	4,067	1,496	1,496	*	*	*	178	388	*	*	*	*	109	*
1 OR LESS YEARS........	67	67	*	*	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS...............	486	409	46	46	*	*	*	*	31	*	*	*	*	*	*
5-9 YEARS...............	740	593	95	95	*	*	*	12	40	*	*	*	*	*	*
10-14 YEARS.............	1,230	988	146	146	*	*	*	46	47	*	*	*	*	3	*
15-19 YEARS.............	754	520	151	151	*	*	*	*	83	*	*	*	*	*	*
20-24 YEARS.............	698	394	273	273	*	*	*	1	30	*	*	*	*	*	*
25-29 YEARS.............	407	265	91	91	*	*	*	49	*	*	*	*	*	2	*
30-34 YEARS.............	527	270	184	184	*	*	*	*	7	*	*	*	*	66	*
35-39 YEARS.............	253	108	68	68	*	*	*	33	44	*	*	*	*	*	*
40 OR MORE YEARS.......	167	68	83	83	*	*	*	*	*	*	*	*	*	16	*
NO REPORT...............	909	385	359	359	*	*	*	37	106	*	*	*	*	22	*
MECHANICAL ENGINEERS															
TOTAL....................	5,577	2,645	2,139	2,136	3	*	*	263	322	*	*	2	*	206	*
1 OR LESS YEARS........	6	6	*	*	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS...............	193	67	119	119	*	*	*	7	*	*	*	*	*	*	*
5-9 YEARS...............	639	445	129	129	*	*	*	*	65	*	*	*	*	*	*
10-14 YEARS.............	1,055	669	192	192	*	*	*	67	92	*	*	*	*	35	*
15-19 YEARS.............	904	407	427	427	*	*	*	24	35	*	*	*	*	11	*
20-24 YEARS.............	624	360	227	227	*	*	*	*	35	*	*	2	*	*	*
25-29 YEARS.............	500	124	294	291	3	*	*	49	16	*	*	*	*	17	*
30-34 YEARS.............	388	15	243	243	*	*	*	79	*	*	*	*	*	51	*
35-39 YEARS.............	170	69	85	85	*	*	*	*	*	*	*	*	*	16	*
40 OR MORE YEARS.......	205	*	94	94	*	*	*	*	35	*	*	*	*	76	*
NO REPORT...............	893	483	329	329	*	*	*	37	44	*	*	*	*	*	*
NUCLEAR ENGINEERS															
TOTAL....................	2,061	1,057	634	634	*	*	*	242	72	*	*	56	*	*	*
1 OR LESS YEARS........	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS...............	131	5	9	9	*	*	*	61	*	*	*	56	*	*	*
5-9 YEARS...............	268	133	89	89	*	*	*	46	*	*	*	*	*	*	*
10-14 YEARS.............	592	408	139	139	*	*	*	44	1	*	*	*	*	*	*
15-19 YEARS.............	154	122	24	24	*	*	*	8	*	*	*	*	*	*	*
20-24 YEARS.............	213	105	73	73	*	*	*	*	35	*	*	*	*	*	*
25-29 YEARS.............	110	27	37	37	*	*	*	24	22	*	*	*	*	*	*
30-34 YEARS.............	136	57	65	65	*	*	*	14	*	*	*	*	*	*	*
35-39 YEARS.............	136	68	54	54	*	*	*	*	14	*	*	*	*	*	*
40 OR MORE YEARS.......	29	16	13	13	*	*	*	*	*	*	*	*	*	*	*
NO REPORT...............	292	116	131	131	*	*	*	45	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS															
TOTAL....................	5,366	2,993	992	992	*	*	*	525	702	89	24	*	24	17	*
1 OR LESS YEARS........	48	11	34	34	*	*	*	*	*	*	*	*	*	3	*
2-4 YEARS...............	424	341	46	46	*	*	*	37	*	*	*	*	*	*	*
5-9 YEARS...............	873	514	258	258	*	*	*	49	22	3	24	*	*	3	*
10-14 YEARS.............	1,209	707	192	192	*	*	*	92	175	43	*	*	*	*	*
15-19 YEARS.............	861	387	180	180	*	*	*	26	204	40	*	*	24	*	*
20-24 YEARS.............	563	297	48	48	*	*	*	91	113	3	*	*	*	11	*
25-29 YEARS.............	255	179	44	44	*	*	*	30	2	*	*	*	*	*	*
30-34 YEARS.............	275	77	44	44	*	*	*	130	24	*	*	*	*	*	*
35-39 YEARS.............	47	26	8	8	*	*	*	*	13	*	*	*	*	*	*
40 OR MORE YEARS.......	41	41	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT...............	770	413	138	138	*	*	*	70	149	*	*	*	*	*	*

* NO CASES REPORTED

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FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
OTHER ENGINEERS															
TOTAL	12,055	5,772	6,348	6,289	29	30	11	478	967	165	•	•	37	252	25
1 OR LESS YEARS	67	26	41	41	•	•	•	•	•	•	•	•	•	•	•
2-4 YEARS	573	277	238	238	•	•	•	58	•	•	•	•	•	•	•
5-9 YEARS	1,694	1,050	386	386	•	•	4	135	86	•	•	•	2	6	25
10-14 YEARS	1,842	930	600	600	•	•	•	31	172	37	•	•	•	72	•
15-19 YEARS	1,824	901	688	686	2	•	7	96	45	85	•	•	•	2	•
20-24 YEARS	1,476	799	512	512	•	•	•	•	126	41	•	•	•	•	•
25-29 YEARS	1,183	261	612	570	12	30	•	49	204	•	•	•	35	22	•
30-34 YEARS	849	278	357	357	•	•	•	7	158	•	•	•	•	49	•
35-39 YEARS	433	148	155	155	•	•	•	52	71	•	•	•	•	7	•
40 OR MORE YEARS	396	76	163	163	•	•	•	50	45	•	•	•	•	62	•
NO REPORT	1,718	1,026	596	581	15	•	•	•	62	2	•	•	•	32	•
LIFE SCIENTISTS															
TOTAL	93,848	13,473	56,787	55,528	1,127	132	2,974	3,165	7,590	764	1,265	378	152	7,133	167
1 OR LESS YEARS	1,979	121	1,192	1,190	•	2	97	40	31	•	20	•	•	464	14
2-4 YEARS	9,011	1,221	5,863	5,807	42	14	256	546	475	57	55	2	•	529	7
5-9 YEARS	16,432	2,648	10,287	10,061	212	14	590	531	1,115	222	234	85	•	693	27
10-14 YEARS	15,265	2,152	9,803	9,531	259	13	547	581	1,354	163	150	91	52	362	10
15-19 YEARS	9,878	1,455	5,836	5,593	214	29	358	442	1,208	102	210	12	38	199	15
20-24 YEARS	8,240	1,019	5,082	4,917	158	7	267	226	1,115	52	136	62	•	247	34
25-29 YEARS	7,041	968	4,184	4,143	25	16	205	206	715	64	155	25	34	469	18
30-34 YEARS	5,415	599	3,342	3,270	72	•	79	130	352	27	86	11	•	782	7
35-39 YEARS	2,776	536	1,216	1,195	21	•	54	41	181	2	11	14	8	713	•
40 OR MORE YEARS	2,522	347	822	822	•	•	35	69	111	•	14	17	•	1,093	14
NO REPORT	15,289	2,404	9,160	8,999	124	37	486	355	933	75	194	59	20	1,582	21
BIOLOGICAL SCIENTISTS															
TOTAL	54,442	5,330	35,840	34,828	909	103	1,181	2,272	4,156	200	481	88	34	4,769	91
1 OR LESS YEARS	1,239	99	765	763	•	2	23	30	18	•	20	•	•	277	7
2-4 YEARS	5,483	472	3,780	3,726	40	14	128	394	318	21	2	•	•	361	7
5-9 YEARS	10,067	1,240	6,831	6,673	144	14	322	376	713	40	25	9	•	510	1
10-14 YEARS	9,597	926	6,765	6,542	210	13	143	450	830	26	108	39	•	300	10
15-19 YEARS	5,429	520	3,505	3,321	177	7	218	286	634	28	102	•	•	132	4
20-24 YEARS	4,462	332	3,064	2,925	132	7	60	175	472	35	91	2	•	177	34
25-29 YEARS	3,771	497	2,323	2,296	18	9	143	149	314	•	39	12	34	253	7
30-34 YEARS	2,892	244	1,783	1,731	52	•	33	67	180	7	24	4	•	550	•
35-39 YEARS	1,352	144	639	618	21	•	12	34	115	•	•	7	•	401	•
40 OR MORE YEARS	1,493	122	531	531	•	•	•	62	61	•	•	•	•	710	7
NO REPORT	8,677	734	5,854	5,702	115	37	99	249	501	43	70	15	•	1,098	14
AGRICULTURAL SCIENTISTS															
TOTAL	17,270	3,450	9,147	8,974	151	22	3	284	2,435	9	393	39	84	1,391	35
1 OR LESS YEARS	144	14	99	99	•	•	•	•	8	•	•	•	•	23	•
2-4 YEARS	1,133	347	557	555	2	•	•	25	132	•	39	•	•	33	•
5-9 YEARS	2,570	684	1,391	1,340	51	•	•	55	233	•	94	39	•	57	17
10-14 YEARS	2,356	496	1,396	1,367	29	•	3	53	328	•	12	•	46	22	•
15-19 YEARS	2,128	448	1,066	1,017	27	22	•	49	453	2	41	•	38	31	•
20-24 YEARS	1,777	233	959	937	22	•	•	•	521	•	28	•	•	36	•
25-29 YEARS	1,801	196	986	986	•	•	•	32	344	7	64	•	•	161	11
30-34 YEARS	1,435	156	913	893	20	•	•	35	116	•	31	•	•	179	7
35-39 YEARS	754	144	325	325	•	•	•	•	14	•	11	•	•	260	•
40 OR MORE YEARS	540	111	147	147	•	•	•	•	7	•	•	•	•	275	•
NO REPORT	2,632	623	1,308	1,308	•	•	•	35	279	•	73	•	•	314	•
MEDICAL SCIENTISTS															
TOTAL	22,136	4,693	11,800	11,726	67	7	1,790	609	999	555	391	251	34	973	41
1 OR LESS YEARS	596	8	328	328	•	•	74	10	5	•	•	•	•	164	7
2-4 YEARS	2,395	402	1,526	1,526	•	•	128	127	25	36	14	2	•	135	•
5-9 YEARS	3,795	724	2,065	2,048	17	•	268	100	169	182	115	37	•	126	9
10-14 YEARS	3,312	730	1,642	1,622	20	•	401	78	196	137	30	52	6	40	•
15-19 YEARS	2,321	490	1,265	1,255	10	•	140	107	121	72	67	12	•	36	11
20-24 YEARS	2,021	454	1,059	1,055	4	•	207	51	122	17	17	60	•	34	•
25-29 YEARS	1,469	275	875	861	7	7	62	23	57	57	52	13	•	55	•
30-34 YEARS	1,088	201	646	646	•	•	46	28	56	20	31	7	•	53	•
35-39 YEARS	670	248	252	252	•	•	42	7	52	2	•	7	8	52	•
40 OR MORE YEARS	489	114	144	144	•	•	35	7	43	•	14	17	•	108	7
NO REPORT	3,980	1,047	1,998	1,989	9	•	387	71	153	32	51	44	20	170	7
PSYCHOLOGISTS															
TOTAL	45,416	10,145	21,833	19,195	987	1,651	6,194	1,693	1,211	221	982	733	5	2,352	47
1 OR LESS YEARS	446	95	193	193	•	•	26	34	•	•	•	4	•	94	•
2-4 YEARS	4,279	676	2,090	1,886	75	129	947	162	32	32	78	148	5	109	•
5-9 YEARS	9,894	2,072	4,408	4,081	104	223	1,910	296	323	23	279	190	•	368	25
10-14 YEARS	8,086	2,034	3,957	3,467	192	298	896	313	242	27	228	161	•	223	5
15-19 YEARS	4,307	1,093	2,388	2,012	137	239	411	148	74	39	45	30	•	79	•
20-24 YEARS	3,165	629	1,641	1,402	53	186	323	160	105	60	55	30	•	162	•
25-29 YEARS	3,289	371	1,738	1,506	102	130	360	179	108	•	84	68	•	181	•
30-34 YEARS	2,805	639	1,311	1,121	12	178	268	23	132	•	72	5	•	322	13
35-39 YEARS	987	156	483	405	60	18	84	56	51	•	3	•	•	154	•
40 OR MORE YEARS	816	206	232	193	16	23	17	43	•	•	•	•	•	318	•
NO REPORT	7,342	1,974	3,392	2,929	236	227	952	279	124	40	138	97	•	342	4
SOCIAL SCIENTISTS															
TOTAL	56,473	4,721	39,252	37,513	1,245	494	138	2,152	3,862	232	1,202	477	665	3,527	265
1 OR LESS YEARS	641	99	340	340	•	•	26	28	77	•	16	•	•	55	•
2-4 YEARS	3,465	456	2,165	2,087	18	60	25	145	284	•	40	63	53	234	•
5-9 YEARS	9,234	1,007	6,214	6,017	122	75	10	527	656	76	236	96	100	287	25
10-14 YEARS	10,738	804	7,390	6,918	342	130	2	406	1,168	•	234	101	284	207	142
15-19 YEARS	7,105	548	5,458	5,221	157	80	41	224	402	44	202	17	41	98	30
20-24 YEARS	4,571	137	3,572	3,329	174	69	•	108	249	2	190	17	26	265	5
25-29 YEARS	3,369	137	2,480	2,363	111	6	•	117	149	40	62	76	64	201	43
30-34 YEARS	3,299	238	2,421	2,338	83	•	•	39	289	•	25	34	•	253	•
35-39 YEARS	1,748	56	955	927	28	•	•	201	92	•	•	33	•	411	•
40 OR MORE YEARS	1,680	163	766	741	25	•	•	38	38	•	•	•	•	658	17
NO REPORT	10,623	1,076	7,491	7,232	185	74	34	319	458	70	197	40	77	858	3

• NO CASES REPORTED

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
ECONOMISTS															
TOTAL......................	14,294	2,161	9,017	8,814	198	5	*	331	1,258	*	121	15	517	868	6
1 OR LESS YEARS.........	150	36	114	114	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS...............	946	205	535	535	*	*	*	10	114	*	13	*	53	16	*
5-9 YEARS...............	1,878	453	1,143	1,143	*	*	*	29	162	*	7	*	44	37	3
10-14 YEARS.............	2,786	396	1,590	1,505	80	5	*	97	445	*	12	*	244	2	*
15-19 YEARS.............	1,698	169	1,097	1,095	2	*	*	45	239	*	39	*	41	65	3
20-24 YEARS.............	1,078	39	880	843	37	*	*	9	64	*	*	*	*	86	*
25-29 YEARS.............	905	79	611	593	18	*	*	48	59	*	22	*	64	22	*
30-34 YEARS.............	920	157	645	645	*	*	*	4	64	*	*	*	*	50	*
35-39 YEARS.............	427	18	236	236	*	*	*	64	*	*	*	*	*	109	*
40 OR MORE YEARS........	571	133	213	213	*	*	*	6	2	*	*	*	*	217	*
NO REPORT...............	2,935	476	1,953	1,892	61	*	*	19	109	*	28	15	71	264	*
SOCIOLOGISTS/ANTHRG.															
TOTAL......................	11,909	487	9,285	8,957	298	30	96	534	301	9	203	18	15	911	50
1 OR LESS YEARS.........	154	9	102	102	*	*	26	*	*	*	*	*	*	17	*
2-4 YEARS...............	704	10	554	544	10	*	25	9	31	*	*	*	*	75	*
5-9 YEARS...............	2,358	63	1,892	1,861	10	21	7	113	106	9	27	*	15	104	22
10-14 YEARS.............	2,082	183	1,703	1,570	133	*	*	75	36	*	21	*	*	64	*
15-19 YEARS.............	1,511	6	1,353	1,312	41	*	38	48	4	*	28	*	*	9	25
20-24 YEARS.............	964	*	770	729	35	6	*	71	30	*	30	*	*	63	*
25-29 YEARS.............	632	7	512	492	17	3	*	47	*	*	5	*	*	61	*
30-34 YEARS.............	659	30	497	491	6	*	*	18	*	*	*	18	*	96	*
35-39 YEARS.............	362	*	244	244	*	*	*	22	*	*	*	*	*	96	*
40 OR MORE YEARS........	344	21	119	119	*	*	*	7	18	*	*	*	*	179	*
NO REPORT...............	2,139	158	1,539	1,493	46	*	*	124	76	*	92	*	*	147	3
OTHER SOCIAL SCIENTISTS															
TOTAL......................	30,270	2,073	20,950	19,762	749	459	42	1,287	2,303	223	878	444	113	1,768	209
1 OR LESS YEARS.........	337	54	124	124	*	*	*	28	77	*	16	*	*	38	*
2-4 YEARS...............	1,815	241	1,076	1,008	8	60	*	126	139	*	27	63	*	143	*
5-9 YEARS...............	4,998	491	3,179	3,013	112	54	3	385	388	67	202	96	41	146	*
10-14 YEARS.............	5,870	225	4,097	3,843	129	125	2	234	687	*	201	101	40	141	142
15-19 YEARS.............	3,896	373	3,008	2,814	114	80	3	131	159	44	135	17	*	24	2
20-24 YEARS.............	2,529	98	1,922	1,757	102	63	*	28	155	2	160	17	26	116	5
25-29 YEARS.............	1,832	51	1,357	1,278	76	3	*	22	90	40	35	76	*	118	43
30-34 YEARS.............	1,720	51	1,279	1,202	77	*	*	17	225	*	25	16	*	107	*
35-39 YEARS.............	959	38	475	447	28	*	*	115	92	*	*	33	*	206	*
40 OR MORE YEARS........	765	9	434	409	25	*	*	25	18	*	*	*	*	262	17
NO REPORT...............	5,549	442	3,999	3,847	78	74	34	176	273	70	77	25	6	447	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
ALL FIELDS														
TOTAL	363,866	120,108	55,265	46,475	18,368	60,312	32,649	27,663	104,956	12,035	25,724	16,441	20,328	3,962
1 OR LESS YEARS	5,226	2,770	1,673	922	175	135	57	78	716	73	373	349	796	14
2-4 YEARS	28,389	15,263	8,591	4,824	1,848	1,217	824	393	5,782	582	2,609	1,509	1,165	262
5-9 YEARS	60,680	26,422	12,050	10,241	4,131	6,134	3,695	2,439	15,674	1,673	5,417	3,074	1,680	606
10-14 YEARS	64,101	22,310	9,001	9,085	4,224	11,555	6,829	4,726	18,478	2,424	4,456	3,108	1,158	612
15-19 YEARS	43,322	13,032	5,861	5,020	2,151	9,390	4,813	4,577	14,152	1,492	2,786	1,443	566	461
20-24 YEARS	33,476	9,925	3,535	4,489	1,901	6,916	3,298	3,618	10,918	1,191	1,756	1,485	933	352
25-29 YEARS	26,422	6,684	2,894	2,987	803	6,526	3,423	3,103	8,324	572	1,631	1,095	1,306	284
30-34 YEARS	21,712	4,944	2,036	2,230	678	4,399	2,089	2,310	6,895	671	1,395	972	2,237	199
35-39 YEARS	11,343	1,961	851	846	264	2,110	952	1,158	2,939	705	481	592	2,400	155
40 OR MORE YEARS	10,585	1,289	634	447	208	1,228	722	506	2,273	811	306	502	3,907	269
NO REPORT	58,610	15,508	8,139	5,384	1,985	10,702	5,947	4,755	18,805	1,341	4,514	2,312	4,180	748
PHYSICAL SCIENTISTS														
TOTAL	67,693	29,681	13,876	12,725	3,080	11,892	8,710	3,182	15,609	1,128	1,446	2,865	4,504	568
1 OR LESS YEARS	1,103	901	495	353	53	6	3	3	31	23	*	14	128	*
2-4 YEARS	5,299	4,214	2,326	1,591	297	173	168	5	433	*	61	200	185	33
5-9 YEARS	9,775	6,087	2,592	2,732	763	960	821	139	1,679	35	279	425	239	71
10-14 YEARS	11,307	4,882	2,029	2,257	596	2,346	1,741	605	2,843	98	398	542	156	42
15-19 YEARS	8,085	3,476	2,107	1,147	222	1,650	1,148	502	2,223	94	234	189	136	83
20-24 YEARS	6,824	2,611	780	1,379	452	1,381	831	550	2,132	72	106	283	153	86
25-29 YEARS	5,551	1,980	796	1,044	140	1,354	1,006	348	1,312	28	133	383	359	2
30-34 YEARS	3,957	1,244	513	606	125	840	637	203	951	134	110	239	423	16
35-39 YEARS	2,898	626	270	343	13	404	285	119	661	247	17	213	730	*
40 OR MORE YEARS	3,103	327	197	78	52	651	447	204	490	241	20	161	1,173	40
NO REPORT	9,791	3,333	1,771	1,195	367	2,127	1,623	504	2,854	156	88	216	822	195
CHEMISTS														
TOTAL	45,376	18,548	8,087	8,376	2,085	8,985	6,855	2,130	9,661	876	1,181	2,329	3,405	391
1 OR LESS YEARS	755	647	314	302	31	6	3	3	13	23	*	14	52	*
2-4 YEARS	3,661	2,915	1,518	1,196	201	156	151	5	271	*	39	139	108	33
5-9 YEARS	6,488	3,813	1,546	1,779	488	765	672	93	1,183	12	153	383	147	32
10-14 YEARS	6,937	2,556	950	1,296	310	1,704	1,365	339	1,716	75	321	387	136	42
15-19 YEARS	5,108	1,998	1,187	689	122	1,080	817	263	1,415	67	232	164	86	66
20-24 YEARS	4,563	1,763	385	974	404	954	579	375	1,253	72	106	210	119	86
25-29 YEARS	3,931	1,287	440	734	113	1,177	900	277	711	*	132	335	287	2
30-34 YEARS	2,707	934	399	410	125	630	495	135	467	120	86	201	269	*
35-39 YEARS	2,155	438	179	259	*	307	216	91	424	219	17	186	564	*
40 OR MORE YEARS	2,437	200	139	36	25	503	341	162	325	198	20	161	990	40
NO REPORT	6,634	1,997	1,030	701	266	1,703	1,316	387	1,883	90	75	149	647	90
PHYSICISTS/ASTRONOMERS														
TOTAL	22,317	11,133	5,789	4,349	995	2,907	1,855	1,052	5,948	252	265	536	1,099	177
1 OR LESS YEARS	348	254	181	51	22	*	*	*	18	*	*	*	76	*
2-4 YEARS	1,638	1,299	808	395	96	17	17	*	162	*	22	61	77	*
5-9 YEARS	3,287	2,274	1,046	953	275	195	149	46	496	23	126	42	92	39
10-14 YEARS	4,370	2,326	1,079	961	286	642	376	266	1,127	23	77	155	20	*
15-19 YEARS	2,977	1,478	920	458	100	570	331	239	808	27	2	25	50	17
20-24 YEARS	2,261	848	395	405	48	427	252	175	879	*	*	73	34	*
25-29 YEARS	1,620	693	356	310	27	177	106	71	601	28	1	48	72	*
30-34 YEARS	1,250	310	114	196	*	210	142	68	484	14	24	38	154	16
35-39 YEARS	743	188	91	84	13	97	69	28	237	28	*	27	166	*
40 OR MORE YEARS	666	127	58	42	27	148	106	42	165	43	*	*	183	*
NO REPORT	3,157	1,336	741	494	101	424	307	117	971	66	13	67	175	105
MATHEMATICAL SCIENTISTS														
TOTAL	16,470	3,390	1,756	1,239	395	1,316	284	1,032	9,602	458	301	383	876	144
1 OR LESS YEARS	162	47	38	9	*	*	*	*	93	2	*	*	20	*
2-4 YEARS	1,120	277	196	52	29	5	5	*	666	41	23	10	83	15
5-9 YEARS	2,301	610	268	244	98	63	24	39	1,242	164	51	109	44	18
10-14 YEARS	2,755	664	283	306	75	143	21	122	1,658	110	34	77	65	4
15-19 YEARS	2,453	400	198	158	44	318	30	288	1,564	8	53	28	14	68
20-24 YEARS	1,591	228	36	135	57	239	20	219	965	41	36	65	6	11
25-29 YEARS	1,210	195	151	36	8	181	74	107	757	12	12	13	32	8
30-34 YEARS	785	121	75	33	13	118	36	82	446	18	15	*	65	2
35-39 YEARS	471	33	2	31	*	34	*	34	269	*	1	*	126	8
40 OR MORE YEARS	526	91	44	39	8	24	8	16	193	7	*	14	187	10
NO REPORT	3,096	724	465	196	63	191	66	125	1,749	55	76	67	234	*
MATHEMATICIANS														
TOTAL	13,819	2,731	1,631	761	339	1,147	213	934	8,277	161	223	378	781	121
1 OR LESS YEARS	137	47	38	9	*	*	*	*	74	*	*	*	16	*
2-4 YEARS	951	231	181	21	29	*	*	*	568	27	20	10	80	15
5-9 YEARS	1,729	471	236	137	98	45	6	39	971	63	15	109	39	16
10-14 YEARS	2,349	466	281	130	55	143	21	122	1,545	17	34	77	63	4
15-19 YEARS	2,092	312	183	99	30	259	30	229	1,357	3	51	28	14	68
20-24 YEARS	1,313	180	34	89	57	225	20	205	798	27	11	60	6	6
25-29 YEARS	992	173	141	24	8	128	33	95	634	12	*	13	32	*
30-34 YEARS	667	107	75	19	13	98	29	69	389	10	15	*	46	2
35-39 YEARS	369	10	2	8	*	34	*	34	215	*	1	*	101	8
40 OR MORE YEARS	416	53	16	37	*	24	8	16	168	*	*	14	155	2
NO REPORT	2,804	681	444	188	49	191	66	125	1,558	2	76	67	229	*
STATISTICIANS														
TOTAL	2,651	659	125	478	56	169	71	98	1,325	297	78	5	95	23
1 OR LESS YEARS	25	*	*	*	*	*	*	*	19	2	*	*	4	*
2-4 YEARS	169	46	15	31	*	5	5	*	98	14	3	*	3	*
5-9 YEARS	572	139	32	107	*	18	18	*	271	101	36	*	5	2
10-14 YEARS	406	198	2	176	20	*	*	*	113	93	*	*	2	*
15-19 YEARS	361	88	15	59	14	59	*	59	207	5	2	*	*	*
20-24 YEARS	278	48	2	46	*	14	*	14	167	14	25	5	*	5
25-29 YEARS	218	22	10	12	*	53	41	12	123	*	12	*	*	8
30-34 YEARS	118	14	*	14	*	20	7	13	57	8	*	*	19	*
35-39 YEARS	102	23	*	23	*	*	*	*	54	*	*	*	25	*
40 OR MORE YEARS	110	38	28	2	8	*	*	*	25	7	*	*	32	8
NO REPORT	292	43	21	8	14	*	*	*	191	53	*	*	5	*

* NO CASES REPORTED

CONTINUED

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER						
COMPUTER SPECIALISTS														
TOTAL......................	9,066	4,512	620	884	3,008	1,693	808	885	1,546	554	217	424	18	102
1 OR LESS YEARS........	98	53	*	15	38	*	*	*	*	*	*	45	*	*
2-4 YEARS..............	670	441	78	91	272	24	1	23	124	22	21	25	9	4
5-9 YEARS..............	2,132	1,292	187	205	900	260	101	159	367	52	42	112	7	*
10-14 YEARS............	2,232	1,136	151	172	813	353	113	240	312	184	57	92	*	98
15-19 YEARS............	1,114	460	34	105	321	344	204	140	235	58	*	15	2	*
20-24 YEARS............	462	179	38	33	108	110	63	47	94	68	7	4	*	*
25-29 YEARS............	439	86	44	17	25	169	123	46	95	27	38	24	*	*
30-34 YEARS............	378	164	37	37	90	61	21	40	114	16	12	11	*	*
35-39 YEARS............	100	84	*	34	50	7	*	7	*	7	*	2	*	*
40 OR MORE YEARS.......	52	24	*	*	24	*	*	*	10	*	*	18	*	*
NO REPORT..............	1,389	593	51	175	367	365	182	183	195	120	40	76	*	*
ENVIRONMENTAL SCIENTISTS														
TOTAL......................	16,589	6,321	3,306	2,729	286	3,624	2,410	1,214	3,617	1,045	395	882	560	145
1 OR LESS YEARS........	284	155	126	29	*	13	13	*	23	2	27	32	32	*
2-4 YEARS..............	1,253	798	417	325	56	87	75	12	221	35	3	90	16	3
5-9 YEARS..............	2,889	1,478	831	601	46	399	232	167	526	224	37	190	32	3
10-14 YEARS............	2,862	1,027	411	521	95	762	648	114	679	120	29	186	33	26
15-19 YEARS............	2,341	746	409	301	36	584	472	112	556	291	63	38	25	38
20-24 YEARS............	1,677	467	210	257	*	520	261	259	432	32	102	53	71	*
25-29 YEARS............	996	407	260	104	43	271	189	82	213	6	10	66	23	*
30-34 YEARS............	1,101	236	110	126	*	310	159	151	283	44	87	76	59	6
35-39 YEARS............	468	92	73	19	*	113	84	29	82	30	21	70	44	16
40 OR MORE YEARS.......	558	100	67	33	*	26	6	20	75	121	7	32	159	38
NO REPORT..............	2,160	815	392	413	10	539	271	268	527	140	9	49	66	15
EARTH SCIENTISTS														
TOTAL......................	12,605	4,076	1,755	2,067	254	2,719	1,680	1,039	3,101	927	373	805	484	120
1 OR LESS YEARS........	202	75	51	24	*	13	13	*	23	*	27	32	32	*
2-4 YEARS..............	858	535	230	249	56	53	41	12	131	35	3	85	13	3
5-9 YEARS..............	1,810	743	309	412	22	254	154	100	395	205	36	155	22	*
10-14 YEARS............	2,068	571	151	333	87	574	475	99	594	102	22	162	25	18
15-19 YEARS............	1,793	518	273	209	36	402	304	98	499	240	38	31	7	38
20-24 YEARS............	1,440	363	140	223	*	428	188	240	400	32	93	53	71	*
25-29 YEARS............	821	269	140	86	43	242	169	73	205	6	10	66	23	*
30-34 YEARS............	881	196	84	112	*	184	78	106	236	37	87	76	59	6
35-39 YEARS............	415	85	66	19	*	83	54	29	73	30	21	70	44	9
40 OR MORE YEARS.......	467	67	34	33	*	26	6	20	75	107	7	26	128	31
NO REPORT..............	1,850	654	277	367	10	460	198	262	470	133	9	49	60	15
OCEANOGRAPHERS														
TOTAL......................	1,818	1,028	792	224	12	445	345	100	182	53	20	36	36	18
1 OR LESS YEARS........	20	18	18	*	*	*	*	*	*	2	*	*	*	*
2-4 YEARS..............	142	105	67	38	*	31	31	*	6	*	*	*	*	*
5-9 YEARS..............	606	426	328	86	12	106	39	67	33	13	1	14	10	3
10-14 YEARS............	410	193	121	72	*	104	90	14	68	12	7	16	2	8
15-19 YEARS............	185	94	76	18	*	67	64	3	7	5	3	*	9	*
20-24 YEARS............	105	24	24	*	*	55	48	7	17	*	9	*	*	*
25-29 YEARS............	70	56	56	*	*	6	6	*	8	*	*	*	*	*
30-34 YEARS............	55	19	12	7	*	22	13	9	7	7	*	*	*	*
35-39 YEARS............	21	7	7	*	*	14	14	*	*	*	*	*	*	*
40 OR MORE YEARS.......	48	6	6	*	*	*	*	*	*	14	*	6	15	7
NO REPORT..............	156	80	77	3	*	40	40	*	36	*	*	*	*	*
ATMOSPHERIC SCIENTISTS														
TOTAL......................	2,166	1,217	759	438	20	460	385	75	334	65	2	41	40	7
1 OR LESS YEARS........	62	62	57	5	*	*	*	*	*	*	*	*	*	*
2-4 YEARS..............	253	158	120	38	*	3	3	*	84	*	*	5	3	*
5-9 YEARS..............	473	309	196	103	12	39	39	*	98	6	*	21	*	*
10-14 YEARS............	384	263	139	116	8	84	83	1	17	6	*	8	6	*
15-19 YEARS............	363	134	60	74	*	115	104	11	50	46	2	7	9	*
20-24 YEARS............	132	80	46	34	*	37	25	12	15	*	*	*	*	*
25-29 YEARS............	105	82	64	18	*	23	14	9	*	*	*	*	*	*
30-34 YEARS............	165	21	14	7	*	104	68	36	40	*	*	*	*	*
35-39 YEARS............	32	*	*	*	*	16	16	*	9	*	*	*	*	7
40 OR MORE YEARS.......	43	27	27	*	*	*	*	*	*	*	*	*	16	*
NO REPORT..............	154	81	38	43	*	39	33	6	21	7	*	*	6	*
ENGINEERS														
TOTAL......................	58,311	23,380	2,777	10,730	9,873	15,193	10,302	4,891	10,744	3,818	1,366	2,282	1,358	170
1 OR LESS YEARS........	313	313	3	234	76	25	*	25	118	24	*	30	3	*
2-4 YEARS..............	3,292	2,443	465	949	1,049	198	195	3	514	88	1	48	*	*
5-9 YEARS..............	8,023	4,520	435	2,282	1,803	1,315	1,159	156	1,149	470	275	248	10	36
10-14 YEARS............	10,856	4,989	278	2,354	2,357	2,958	2,322	636	1,150	893	300	432	112	22
15-19 YEARS............	8,039	3,128	466	1,339	1,323	2,550	1,534	1,016	1,392	543	149	261	13	3
20-24 YEARS............	6,946	2,578	289	1,161	1,128	1,974	1,166	808	1,262	671	126	302	29	4
25-29 YEARS............	4,527	1,103	177	430	496	1,457	890	567	1,382	212	144	176	41	12
30-34 YEARS............	3,972	975	168	431	376	1,201	592	609	1,056	93	166	147	333	1
35-39 YEARS............	1,895	423	45	184	194	564	353	211	369	157	16	127	222	17
40 OR MORE YEARS.......	1,328	212	*	112	100	237	166	71	350	146	*	32	319	32
NO REPORT..............	8,920	2,696	471	1,254	971	2,714	1,925	789	2,002	321	189	479	276	43
AERO/ASTRO ENGINEERS														
TOTAL......................	2,536	1,076	175	588	313	838	620	218	387	40	84	50	18	43
1 OR LESS YEARS........	41	41	*	41	*	*	*	*	*	*	*	*	*	*
2-4 YEARS..............	132	88	50	38	*	*	*	*	42	*	*	2	*	*
5-9 YEARS..............	216	167	*	128	39	26	26	*	*	23	*	*	*	*
10-14 YEARS............	448	131	*	62	69	183	93	90	88	*	46	*	*	*
15-19 YEARS............	580	363	82	140	141	141	141	*	68	*	*	8	*	*
20-24 YEARS............	329	106	43	63	*	113	113	*	108	*	*	*	2	*
25-29 YEARS............	209	51	*	51	*	120	103	17	*	*	38	*	*	*
30-34 YEARS............	151	32	*	*	32	74	39	35	29	*	*	*	16	*
35-39 YEARS............	85	44	*	12	32	8	8	*	15	*	*	18	*	*
40 OR MORE YEARS.......	17	*	*	*	*	*	*	*	*	17	*	*	*	*
NO REPORT..............	328	53	*	53	*	173	97	76	37	*	*	22	*	43

* NO CASES REPORTED

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CONTINUED

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER						
CHEMICAL ENGINEERS														
TOTAL	7,612	3,605	278	1,847	1,480	1,624	1,192	432	963	387	212	355	466	*
1 OR LESS YEARS	181	178	3	103	72	*	*	*	*	3	*	*	*	*
2-4 YEARS	618	501	86	289	126	1	1	*	116	*	*	*	*	*
5-9 YEARS	1,191	851	50	411	390	212	212	*	89	*	14	24	1	*
10-14 YEARS	1,358	526	2	340	184	481	435	46	125	87	23	114	2	*
15-19 YEARS	668	281	63	107	111	156	35	121	70	66	88	7	*	*
20-24 YEARS	942	424	*	204	220	264	178	86	70	149	4	31	*	*
25-29 YEARS	649	198	16	16	166	136	53	83	199	18	16	82	*	*
30-34 YEARS	493	126	*	32	94	123	91	32	64	16	16	32	116	*
35-39 YEARS	322	41	*	33	8	64	48	16	16	*	*	37	164	*
40 OR MORE YEARS	113	32	*	16	16	*	*	*	17	16	*	*	48	*
NO REPORT	1,077	447	58	296	93	187	139	48	197	32	51	28	135	*
CIVIL ENGINEERS														
TOTAL	6,032	1,220	134	572	514	1,167	443	724	2,066	983	185	262	126	23
1 OR LESS YEARS	23	2	*	2	*	*	*	*	*	21	*	*	*	*
2-4 YEARS	77	42	*	*	42	22	22	*	13	*	*	*	*	*
5-9 YEARS	974	360	82	220	58	91	91	*	284	187	2	50	*	*
10-14 YEARS	1,178	388	9	121	258	35	27	8	274	371	56	34	*	*
15-19 YEARS	830	140	*	68	72	319	109	210	210	112	*	46	*	3
20-24 YEARS	725	97	7	43	47	135	25	110	300	74	92	7	16	4
25-29 YEARS	601	23	*	*	23	159	*	159	340	44	35	*	*	*
30-34 YEARS	386	56	36	20	*	144	35	109	99	*	*	52	35	*
35-39 YEARS	150	*	*	*	*	35	35	*	51	29	*	*	35	*
40 OR MORE YEARS	182	29	*	15	14	32	*	32	48	17	*	*	40	16
NO REPORT	906	83	*	83	*	195	99	96	447	128	*	53	*	*
ELEC./ELECTRON. ENGINEERS														
TOTAL	10,834	4,405	273	1,703	2,429	2,999	2,163	836	2,316	377	242	314	164	17
1 OR LESS YEARS	80	9	*	5	4	25	*	25	46	*	*	*	*	*
2-4 YEARS	658	471	*	144	327	*	*	*	141	41	1	4	*	*
5-9 YEARS	1,428	754	10	307	437	305	280	25	240	27	73	29	*	*
10-14 YEARS	1,944	950	29	234	687	615	555	60	289	43	24	23	*	*
15-19 YEARS	1,464	566	35	238	293	489	378	111	279	75	17	38	*	*
20-24 YEARS	1,376	658	106	376	176	397	203	194	305	*	16	*	*	*
25-29 YEARS	613	191	*	86	105	127	104	23	153	45	35	62	*	*
30-34 YEARS	767	199	35	74	90	131	80	51	381	19	37	*	*	*
35-39 YEARS	299	22	*	6	16	137	54	83	79	*	16	28	*	17
40 OR MORE YEARS	178	29	*	*	29	34	34	*	38	*	*	*	77	*
NO REPORT	2,027	556	58	233	265	739	475	264	365	127	23	130	87	*
MATERIALS SCI. ENGINEERS														
TOTAL	6,238	3,035	633	1,665	737	1,652	1,206	446	820	260	96	266	109	*
1 OR LESS YEARS	67	67	*	67	*	*	*	*	*	*	*	*	*	*
2-4 YEARS	486	389	37	204	148	31	31	*	41	*	*	25	*	*
5-9 YEARS	740	432	60	265	107	151	93	58	70	1	46	40	*	*
10-14 YEARS	1,230	783	182	388	213	313	267	46	55	33	*	43	3	*
15-19 YEARS	754	382	106	196	80	264	156	108	46	46	*	16	*	*
20-24 YEARS	698	290	51	123	116	195	125	70	133	43	*	37	*	*
25-29 YEARS	407	140	16	113	11	189	171	18	59	17	*	*	2	*
30-34 YEARS	527	71	16	55	*	199	147	52	117	7	50	17	66	*
35-39 YEARS	253	62	16	32	14	46	30	16	52	49	*	44	*	*
40 OR MORE YEARS	167	16	*	16	*	68	36	32	35	32	*	*	16	*
NO REPORT	909	403	149	206	48	196	150	46	212	32	*	44	22	*
MECHANICAL ENGINEERS														
TOTAL	5,577	2,234	344	875	1,015	1,039	660	379	1,502	378	132	86	206	*
1 OR LESS YEARS	6	*	*	*	*	*	*	*	*	*	*	6	*	*
2-4 YEARS	193	88	*	21	67	3	*	3	102	*	*	*	*	*
5-9 YEARS	639	323	49	156	118	125	79	46	81	56	51	3	*	*
10-14 YEARS	1,055	672	*	277	395	251	123	128	97	*	*	*	35	*
15-19 YEARS	904	348	136	107	105	214	170	44	199	88	44	*	11	*
20-24 YEARS	624	254	*	121	133	101	61	40	105	118	*	46	*	*
25-29 YEARS	500	59	15	*	44	118	83	35	277	16	13	*	17	*
30-34 YEARS	388	129	35	81	13	51	*	51	157	*	*	*	51	*
35-39 YEARS	170	53	*	*	53	32	*	32	69	*	*	*	16	*
40 OR MORE YEARS	205	*	*	*	*	35	35	*	94	*	*	*	76	*
NO REPORT	893	308	109	112	87	109	109	*	321	100	24	31	*	*
NUCLEAR ENGINEERS														
TOTAL	2,061	914	*	502	412	671	545	126	154	183	16	123	*	*
1 OR LESS YEARS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS	131	66	*	66	*	62	62	*	*	3	*	*	*	*
5-9 YEARS	268	169	*	116	53	25	25	*	22	50	*	2	*	*
10-14 YEARS	592	301	*	211	90	110	110	*	23	86	*	72	*	*
15-19 YEARS	154	91	*	24	67	63	*	63	*	*	*	*	*	*
20-24 YEARS	213	39	*	*	39	60	36	24	35	44	*	35	*	*
25-29 YEARS	110	69	*	47	22	41	38	3	*	*	*	*	*	*
30-34 YEARS	136	16	*	*	16	104	68	36	*	*	16	*	*	*
35-39 YEARS	136	51	*	14	37	71	71	*	14	*	*	*	*	*
40 OR MORE YEARS	29	16	*	*	16	*	*	*	13	*	*	*	*	*
NO REPORT	292	96	*	24	72	135	135	*	47	*	*	14	*	*
SYSTEMS DESIGN ENGINEERS														
TOTAL	5,366	2,436	127	653	1,656	1,535	1,101	434	567	467	143	190	17	11
1 OR LESS YEARS	48	14	*	14	*	*	*	*	31	*	*	*	3	*
2-4 YEARS	424	360	8	63	289	3	3	*	44	*	*	17	*	*
5-9 YEARS	873	496	61	126	309	63	63	*	196	46	33	25	3	11
10-14 YEARS	1,209	476	*	192	284	408	280	128	49	186	44	46	*	*
15-19 YEARS	861	277	*	63	214	317	226	91	110	133	*	24	*	*
20-24 YEARS	563	224	*	74	150	249	171	78	*	22	14	43	11	*
25-29 YEARS	255	70	*	3	67	86	86	*	48	51	*	*	*	*
30-34 YEARS	275	165	*	50	115	71	38	33	13	13	13	*	*	*
35-39 YEARS	47	*	*	*	*	31	18	13	*	16	*	*	*	*
40 OR MORE YEARS	41	41	*	16	25	*	*	*	*	*	*	*	*	*
NO REPORT	770	313	58	52	203	307	216	91	76	*	39	35	*	*

* NO CASES REPORTED

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		RESEARCH AND DEVELOPMENT	BASIC	APPL'D		MANAGEMENT OR ADMIN					SALES/			
FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	TOTAL	RE-SEARCH	RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
OTHER ENGINEERS														
TOTAL......................	12,055	4,455	813	2,325	1,317	3,668	2,372	1,296	1,969	743	256	636	252	76
1 OR LESS YEARS.........	67	2	*	2	*	*	*	*	41	*	*	24	*	*
2-4 YEARS................	573	438	264	124	50	76	76	*	15	44	*	*	*	*
5-9 YEARS................	1,694	968	123	553	292	317	290	27	167	80	56	75	6	25
10-14 YEARS..............	1,842	762	56	529	177	562	432	130	150	87	107	80	72	22
15-19 YEARS..............	1,824	680	44	396	240	587	319	268	410	23	*	122	2	*
20-24 YEARS..............	1,476	486	82	157	247	460	254	206	206	221	*	103	*	*
25-29 YEARS..............	1,183	302	130	114	58	481	252	229	306	21	7	32	22	12
30-34 YEARS..............	849	181	46	119	16	304	94	210	196	38	34	46	49	1
35-39 YEARS..............	433	150	29	87	34	140	89	51	73	63	*	*	7	*
40 OR MORE YEARS........	396	49	*	49	*	68	61	7	105	64	*	32	62	16
NO REPORT...............	1,718	437	39	195	203	673	505	168	300	102	52	122	32	*
LIFE SCIENTISTS														
TOTAL......................	93,848	39,888	27,314	11,497	1,077	12,457	6,807	5,650	21,990	1,623	5,297	4,225	7,133	1,235
1 OR LESS YEARS.........	1,979	983	851	124	8	62	41	21	184	15	150	107	464	14
2-4 YEARS................	9,011	5,676	4,421	1,112	143	359	249	110	1,267	81	523	515	529	61
5-9 YEARS................	16,432	8,868	6,263	2,254	351	1,178	821	357	3,502	142	876	930	693	243
10-14 YEARS..............	15,265	6,901	4,695	2,066	140	1,918	1,122	796	4,090	344	858	698	362	96
15-19 YEARS..............	9,878	3,852	2,281	1,506	65	1,965	910	1,055	2,520	173	607	427	199	135
20-24 YEARS..............	8,240	3,098	1,809	1,157	132	1,502	762	740	2,378	136	360	388	247	131
25-29 YEARS..............	7,041	2,462	1,298	1,091	73	1,608	909	699	1,782	105	210	252	469	153
30-34 YEARS..............	5,415	1,555	894	626	35	969	431	538	1,556	66	213	200	782	74
35-39 YEARS..............	2,776	582	390	185	7	486	212	274	609	139	179	47	713	21
40 OR MORE YEARS........	2,522	332	251	74	7	188	91	97	436	196	127	97	1,093	53
NO REPORT...............	15,289	5,579	4,161	1,302	116	2,222	1,259	963	3,666	226	1,194	564	1,582	256
BIOLOGICAL SCIENTISTS														
TOTAL......................	54,442	25,647	21,332	3,853	462	5,036	2,786	2,250	15,217	751	948	1,450	4,769	624
1 OR LESS YEARS.........	1,239	710	674	28	8	56	41	15	112	15	27	35	277	7
2-4 YEARS................	5,483	3,833	3,338	420	75	42	24	18	915	37	58	187	361	50
5-9 YEARS................	10,067	6,192	5,097	897	198	531	416	115	2,261	74	219	202	510	78
10-14 YEARS..............	9,597	4,763	3,892	849	22	779	456	323	2,994	251	245	227	300	38
15-19 YEARS..............	5,429	2,370	1,810	546	14	694	309	385	1,787	83	106	152	132	105
20-24 YEARS..............	4,442	1,659	1,341	256	62	610	358	252	1,667	23	57	158	177	91
25-29 YEARS..............	3,771	1,312	1,026	272	14	736	431	305	1,230	27	63	110	253	40
30-34 YEARS..............	2,892	797	594	175	28	357	129	228	986	42	45	82	550	33
35-39 YEARS..............	1,352	364	296	61	7	172	61	111	362	27	14	20	401	12
40 OR MORE YEARS........	1,493	211	184	27	*	95	35	60	296	96	21	43	710	21
NO REPORT...............	8,677	3,436	3,080	322	34	964	526	438	2,627	76	93	234	1,098	149
AGRICULTURAL SCIENTISTS														
TOTAL......................	17,270	6,732	1,556	4,975	201	3,348	1,924	1,424	2,997	407	715	1,342	1,391	338
1 OR LESS YEARS.........	144	79	32	47	*	1	*	1	19	*	11	11	23	*
2-4 YEARS................	1,133	495	153	316	26	131	84	47	215	36	71	150	33	2
5-9 YEARS................	2,570	984	216	731	37	284	202	82	661	42	115	307	57	140
10-14 YEARS..............	2,356	1,006	169	804	33	339	234	105	459	73	148	268	22	41
15-19 YEARS..............	2,128	954	207	740	7	587	277	310	259	64	90	136	31	7
20-24 YEARS..............	1,777	822	151	637	34	460	226	234	261	11	32	142	36	13
25-29 YEARS..............	1,801	777	127	636	14	476	288	188	217	28	21	82	161	39
30-34 YEARS..............	1,435	466	105	361	*	332	194	138	299	7	58	62	179	32
35-39 YEARS..............	754	123	35	88	*	134	74	60	131	43	39	18	260	4
40 OR MORE YEARS........	540	61	7	47	7	57	37	20	66	42	*	14	275	25
NO REPORT...............	2,632	965	354	568	43	547	308	239	430	59	130	152	314	33
MEDICAL SCIENTISTS														
TOTAL......................	22,136	7,509	4,426	2,669	414	4,073	2,097	1,976	3,776	465	3,634	1,433	973	273
1 OR LESS YEARS.........	596	194	145	49	*	5	*	5	53	*	112	61	164	7
2-4 YEARS................	2,395	1,348	930	376	42	186	141	45	137	8	394	178	135	9
5-9 YEARS................	3,795	1,692	950	626	116	363	203	160	600	26	542	421	126	25
10-14 YEARS..............	3,312	1,132	634	413	85	800	432	368	637	20	465	203	40	15
15-19 YEARS..............	2,321	528	264	220	44	684	324	360	474	26	411	139	36	23
20-24 YEARS..............	2,021	617	317	264	36	432	178	254	450	102	271	88	34	27
25-29 YEARS..............	1,469	373	145	183	45	396	190	206	335	50	126	60	55	74
30-34 YEARS..............	1,088	292	195	90	7	280	108	172	271	17	110	56	53	9
35-39 YEARS..............	670	95	59	36	*	180	77	103	136	67	126	9	52	5
40 OR MORE YEARS........	489	60	60	*	*	36	19	17	74	58	106	40	108	7
NO REPORT...............	3,980	1,178	727	412	39	711	425	286	609	91	971	178	170	72
PSYCHOLOGISTS														
TOTAL......................	45,416	5,383	2,461	2,518	404	5,853	1,062	4,791	12,563	2,051	15,168	1,512	2,352	534
1 OR LESS YEARS.........	446	114	69	45	*	7	*	7	34	2	166	29	94	*
2-4 YEARS................	4,279	739	314	423	2	228	70	158	1,007	102	1,908	147	109	39
5-9 YEARS................	9,394	1,625	743	770	112	957	166	791	2,454	390	3,607	367	368	126
10-14 YEARS..............	8,086	965	399	418	148	1,180	239	941	2,372	415	2,571	294	223	66
15-19 YEARS..............	4,307	314	159	134	21	554	68	486	1,482	139	1,502	199	79	38
20-24 YEARS..............	3,165	283	169	92	22	488	63	425	986	153	887	135	162	71
25-29 YEARS..............	3,289	186	109	59	18	706	109	597	942	179	988	107	181	*
30-34 YEARS..............	2,805	246	78	142	26	385	106	279	759	218	750	77	322	48
35-39 YEARS..............	987	63	17	46	*	150	*	150	351	69	138	5	154	57
40 OR MORE YEARS........	816	100	52	31	17	37	*	37	143	42	81	57	318	38
NO REPORT...............	7,342	748	352	358	38	1,161	241	920	2,033	342	2,570	95	342	51
SOCIAL SCIENTISTS														
TOTAL......................	56,473	7,553	3,155	4,153	245	8,284	2,266	6,018	29,285	1,358	1,534	3,868	3,527	1,064
1 OR LESS YEARS.........	641	204	91	113	*	22	*	22	233	5	30	92	55	*
2-4 YEARS................	3,465	675	394	281	*	143	61	82	1,550	213	69	474	234	107
5-9 YEARS................	9,234	1,942	731	1,153	58	1,002	371	631	4,755	196	250	693	287	109
10-14 YEARS..............	10,738	1,746	755	991	*	1,895	623	1,272	5,374	260	209	787	207	260
15-19 YEARS..............	7,105	656	207	330	119	1,625	447	978	4,180	186	178	286	98	96
20-24 YEARS..............	4,571	481	204	275	2	702	132	570	2,669	18	132	255	265	49
25-29 YEARS..............	3,369	265	59	206	*	780	123	657	1,841	3	96	74	201	109
30-34 YEARS..............	3,299	403	161	229	13	515	107	408	1,730	82	42	222	253	52
35-39 YEARS..............	1,748	58	54	4	*	352	18	334	598	56	109	128	411	36
40 OR MORE YEARS........	1,680	103	23	80	*	65	4	61	576	58	71	91	658	58
NO REPORT...............	10,623	1,020	476	491	53	1,383	380	1,003	5,779	281	348	766	858	188

* NO CASES REPORTED

CONTINUED

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHFR						
ECONOMISTS														
TOTAL......................	14,294	2,972	778	2,171	23	1,815	628	1,187	6,769	615	283	787	868	185
1 OR LESS YEARS..........	150	96	64	32	*	*	*	*	50	*	*	4	*	*
2-4 YEARS................	946	239	105	134	*	*	*	*	438	164	2	67	16	20
5-9 YEARS................	1,878	629	47	562	20	53	17	36	941	85	3	115	37	15
10-14 YEARS..............	2,786	906	294	612	*	289	164	125	1,178	127	15	250	2	19
15-19 YEARS..............	1,698	171	4	164	3	451	176	275	827	46	32	103	65	3
20-24 YEARS..............	1,078	174	30	144	*	101	38	63	614	18	28	40	86	17
25-29 YEARS..............	905	175	*	175	*	193	28	165	495	*	18	2	22	*
30-34 YEARS..............	920	75	*	75	*	219	18	201	426	18	36	50	50	46
35-39 YEARS..............	427	18	18	*	*	120	18	102	162	*	*	*	109	18
40 OR MORE YEARS........	571	36	*	36	*	22	4	18	177	52	45	4	217	18
NO REPORT................	2,935	453	216	237	*	367	165	202	1,461	105	104	152	264	29
SOCIOLOGISTS/ANTHRO.														
TOTAL......................	11,909	1,821	1,006	809	6	1,288	349	939	6,859	18	255	480	911	277
1 OR LESS YEARS..........	154	8	8	*	*	22	*	22	72	*	26	9	17	*
2-4 YEARS................	704	223	189	34	*	*	*	*	363	*	35	5	75	3
5-9 YEARS................	2,358	512	220	292	*	110	57	53	1,438	*	44	92	104	58
10-14 YEARS..............	2,082	222	55	167	*	259	76	183	1,338	7	68	88	64	36
15-19 YEARS..............	1,511	133	98	35	*	301	84	217	960	4	11	29	9	64
20-24 YEARS..............	964	229	130	99	*	128	6	122	477	*	9	33	63	25
25-29 YEARS..............	632	66	58	8	*	100	18	82	380	3	4	*	61	18
30-34 YEARS..............	659	126	87	39	*	97	18	79	338	2	*	*	96	*
35-39 YEARS..............	362	40	36	4	*	65	*	65	143	*	*	18	96	*
40 OR MORE YEARS........	344	69	23	26	*	7	*	7	74	*	3	28	179	4
NO REPORT................	2,139	213	102	105	6	199	90	109	1,276	2	55	178	147	69
OTHER SOCIAL SCIENTISTS														
TOTAL......................	30,270	2,760	1,371	1,173	216	5,181	1,289	3,892	15,657	725	996	2,601	1,748	602
1 OR LESS YEARS..........	337	100	19	81	*	*	*	*	111	5	4	79	38	*
2-4 YEARS................	1,815	213	100	113	*	143	61	82	749	49	32	402	143	84
5-9 YEARS................	4,998	801	464	299	38	839	297	542	2,376	111	203	486	146	36
10-14 YEARS..............	5,870	618	406	212	*	1,347	383	964	2,858	126	126	449	141	205
15-19 YEARS..............	3,896	352	105	131	116	673	187	486	2,393	136	135	154	24	29
20-24 YEARS..............	2,529	78	44	32	2	473	88	385	1,578	*	95	182	116	7
25-29 YEARS..............	1,832	24	1	23	*	487	77	410	966	*	74	72	118	91
30-34 YEARS..............	1,720	202	74	115	13	199	71	128	966	62	6	172	107	6
35-39 YEARS..............	959	*	*	*	*	167	*	167	293	56	109	110	206	18
40 OR MORE YEARS........	765	18	*	18	*	36	*	36	325	6	23	59	262	36
NO REPORT................	5,549	354	158	149	47	817	125	692	3,042	174	189	436	447	90

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

		SEX		RACE				
FIELD	TOTAL	MEN	WOMEN	WHITE	BLACK	AMERICAN INDIAN	ASIAN	NO REPORT
TOTAL....................	34,700	35,600	27,000	34,800	31,700	35,500	34,200	35,900
PHYSICAL SCIENTISTS........	36,200	36,500	29,400	36,400	31,700	30,800	34,100	39,000
CHEMISTS..................	36,200	36,700	29,100	36,500	30,800	29,900	33,600	42,000
PHYSICISTS/ASTRONOMERS...	36,100	36,200	31,200	36,100	37,700	**	35,300	**
MATHEMATICAL SCIENTISTS...	31,300	31,900	26,800	31,400	32,900	**	30,100	33,900
MATHEMATICIANS............	30,900	31,300	26,700	31,000	32,400	**	30,300	29,700
STATISTICIANS.............	34,600	35,800	27,000	34,600	**	**	29,900	**
COMPUTER SPECIALISTS......	34,400	34,700	28,700	34,300	**	**	34,500	**
ENVIRONMENTAL SCIENTISTS..	36,500	36,900	29,200	36,500	**	**	37,400	**
EARTH SCIENTISTS..........	37,000	37,400	30,000	36,800	**	**	39,200	**
OCEANOGRAPHERS............	32,100	33,500	28,700	32,600	**	**	**	**
ATMOSPHERIC SCIENTISTS...	36,300	36,800	28,000	36,700	**	**	**	**
ENGINEERS.................	40,200	40,300	32,000	40,600	35,000	42,300	37,000	38,900
AERO/ASTRO ENGINEERS.....	41,300	41,400	**	42,100	**	**	**	**
CHEMICAL ENGINEERS.......	42,900	42,900	32,600	44,600	**	**	37,000	**
CIVIL ENGINEERS..........	36,800	36,900	28,600	36,300	**	**	38,600	**
ELEC./ELECTRON. ENGINEERS	41,100	41,300	31,800	41,500	**	**	37,900	**
MATERIALS SCI. ENGINEERS.	40,000	40,100	32,600	40,500	**	**	35,300	**
MECHANICAL ENGINEERS.....	38,700	38,800	**	39,700	**	**	37,100	**
NUCLEAR ENGINEERS........	38,300	38,400	**	40,000	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	40,000	40,000	34,900	40,100	**	**	37,500	**
OTHER ENGINEERS..........	39,700	39,900	31,700	40,100	**	**	36,900	**
LIFE SCIENTISTS...........	33,200	34,300	27,100	33,300	31,300	34,800	31,500	34,200
BIOLOGICAL SCIENTISTS....	31,600	32,700	26,300	31,700	29,900	35,700	30,700	29,900
AGRICULTURAL SCIENTISTS..	33,600	33,800	26,200	33,900	29,500	**	28,200	**
MEDICAL SCIENTISTS.......	37,900	40,200	29,500	38,400	32,800	**	34,200	39,300
PSYCHOLOGISTS.............	30,700	32,400	26,200	30,700	30,600	33,100	29,600	32,500
SOCIAL SCIENTISTS.........	30,800	31,700	25,900	30,900	30,700	35,600	29,700	30,100
ECONOMISTS................	36,500	36,900	31,400	36,800	**	**	33,100	**
SOCIOLOGISTS/ANTHRO......	28,500	29,700	25,100	28,300	29,400	**	29,100	**
OTHER SOCIAL SCIENTISTS..	29,900	30,400	25,800	29,900	30,600	**	29,100	30,000

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

BEST COPY AVAILABLE

		AGE										
FIELD	TOTAL	UNDER 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70 OR OVER	NO REPORT
TOTAL	34,700	25,900	27,500	31,400	35,500	37,600	40,200	41,500	41,100	42,200	36,500	**
PHYSICAL SCIENTISTS	36,200	28,900	30,000	33,300	36,400	38,200	40,900	46,600	42,200	43,300	**	**
CHEMISTS	36,200	29,600	30,500	32,800	36,600	39,000	41,000	48,400	41,800	43,200	**	**
PHYSICISTS/ASTRONOMERS	36,100	27,800	28,900	34,000	36,300	36,700	40,800	45,200	43,000	46,200	**	**
MATHEMATICAL SCIENTISTS	31,300	22,400	23,800	29,100	32,300	36,100	37,800	40,700	40,500	42,200	**	**
MATHEMATICIANS	30,900	22,100	23,500	28,900	31,100	35,800	36,900	40,300	40,500	41,000	**	**
STATISTICIANS	34,600	**	24,400	32,200	39,300	36,300	40,200	**	**	**	**	**
COMPUTER SPECIALISTS	34,400	**	31,000	33,300	35,900	37,200	39,900	38,600	**	**	**	**
ENVIRONMENTAL SCIENTISTS	36,500	22,300	28,700	33,000	37,300	41,900	44,600	43,200	50,000	42,300	**	**
EARTH SCIENTISTS	37,000	**	30,800	34,600	36,900	41,300	44,700	43,100	50,200	40,900	**	**
OCEANOGRAPHERS	32,100	**	24,300	26,800	34,100	40,700	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS	36,300	**	26,600	35,000	41,000	**	**	**	**	**	**	**
ENGINEERS	40,200	32,200	33,700	38,100	40,800	42,500	45,600	46,400	44,400	48,400	**	**
AERO/ASTRO ENGINEERS	41,300	**	**	38,500	**	**	**	**	**	**	**	**
CHEMICAL ENGINEERS	42,900	**	34,800	40,400	45,700	46,500	50,900	48,400	**	**	**	**
CIVIL ENGINEERS	36,800	**	29,800	36,900	40,100	35,400	37,500	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	41,100	**	34,800	37,900	43,700	44,900	45,100	46,600	**	**	**	**
MATERIALS SCI. ENGINEERS	40,000	**	34,400	38,200	40,400	38,700	45,400	45,600	45,900	**	**	**
MECHANICAL ENGINEERS	38,700	**	32,300	38,700	37,600	40,900	**	**	**	**	**	**
NUCLEAR ENGINEERS	38,300	**	**	36,000	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS	40,000	**	33,200	39,300	41,000	50,100	50,300	44,600	**	**	**	**
OTHER ENGINEERS	39,700	**	32,900	36,400	40,200	42,000	45,800	49,900	**	**	**	**
LIFE SCIENTISTS	33,200	24,500	25,000	29,200	33,800	36,300	40,200	40,700	41,000	43,000	**	**
BIOLOGICAL SCIENTISTS	31,600	22,500	24,200	28,000	32,600	34,800	39,800	39,700	39,400	41,900	**	**
AGRICULTURAL SCIENTISTS	33,600	26,500	25,300	29,300	33,700	35,300	39,700	40,000	39,900	37,900	**	**
MEDICAL SCIENTISTS	37,900	**	28,100	33,200	38,400	42,700	42,100	48,300	47,800	50,200	**	**
PSYCHOLOGISTS	30,700	21,400	24,500	28,100	33,000	35,100	36,100	36,900	40,100	35,800	**	**
SOCIAL SCIENTISTS	30,800	25,500	24,600	28,300	30,500	33,500	34,500	37,700	37,900	41,700	**	**
ECONOMISTS	36,500	**	28,300	37,000	36,700	39,800	37,200	41,700	39,900	48,300	**	**
SOCIOLOGISTS/ANTHRO	28,500	**	22,900	23,800	28,700	31,000	32,500	36,900	34,800	42,600	**	**
OTHER SOCIAL SCIENTISTS	29,900	**	23,700	27,500	30,100	33,200	34,100	37,100	37,600	40,000	**	**

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NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

FIELD	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
TOTAL....................	34,700	35,200	33,100	36,000	36,500	43,200	45,800	39,900	30,100	39,500	34,900	34,600	**	35,200
PHYSICAL SCIENTISTS.......	36,200	35,800	35,000	36,300	35,800	45,900	47,700	41,300	30,500	36,700	40,100	38,100	**	44,100
CHEMISTS.................	36,200	35,500	35,100	35,700	35,400	45,300	45,800	42,000	29,700	**	40,800	39,700	**	**
PHYSICISTS/ASTRONOMERS...	36,100	36,400	34,900	38,900	37,000	48,200	50,000	40,500	31,500	**	35,700	34,100	**	**
MATHEMATICAL SCIENTISTS...	31,300	34,500	31,200	36,900	35,500	39,800	49,300	39,000	29,700	38,500	36,500	27,300	**	**
MATHEMATICIANS...........	30,900	33,600	30,900	38,700	32,600	39,600	49,100	38,500	29,700	**	**	27,300	**	**
STATISTICIANS............	34,600	36,200	**	36,000	**	**	**	**	29,500	**	**	**	**	**
COMPUTER SPECIALISTS......	34,400	34,500	34,400	38,300	33,300	40,200	44,300	36,300	30,300	37,300	**	22,200	**	**
ENVIRONMENTAL SCIENTISTS..	36,500	36,100	34,400	37,700	31,900	44,300	44,300	44,200	30,300	39,500	40,100	34,100	**	**
EARTH SCIENTISTS.........	37,000	38,200	37,100	38,800	33,800	44,800	43,900	48,700	30,400	39,300	40,200	34,000	**	**
OCEANOGRAPHERS...........	32,100	29,300	30,400	22,600	**	40,400	40,500	**	28,500	**	**	**	**	**
ATMOSPHERIC SCIENTISTS...	36,300	35,000	33,100	37,100	**	47,600	49,200	**	27,800	**	**	**	**	**
ENGINEERS.................	40,200	37,900	38,900	37,900	37,700	47,100	47,200	46,900	34,600	40,800	40,100	42,200	**	**
AERO/ASTRO ENGINEERS.....	41,300	37,700	**	36,400	**	43,800	42,900	**	**	**	**	**	**	**
CHEMICAL ENGINEERS.......	42,900	40,600	**	41,100	40,200	50,100	45,800	**	37,300	**	**	**	**	**
CIVIL ENGINEERS..........	36,800	35,400	**	35,200	**	48,300	**	48,700	33,700	40,800	**	**	**	**
ELEC./ELECTRON. ENGINEERS	41,100	40,300	**	41,800	38,800	50,200	50,500	46,900	34,400	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	40,000	37,500	40,300	37,300	34,700	45,900	45,900	**	39,300	**	**	**	**	**
MECHANICAL ENGINEERS.....	38,700	37,500	**	36,700	37,800	44,700	45,300	**	36,400	**	**	**	**	**
NUCLEAR ENGINEERS........	38,300	36,800	**	35,200	**	44,600	46,000	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	40,000	36,600	**	37,700	36,500	50,200	50,300	**	34,500	40,800	**	**	**	**
OTHER ENGINEERS..........	39,700	37,600	36,600	37,400	38,100	45,700	46,200	43,800	33,800	40,900	**	42,500	**	**
LIFE SCIENTISTS...........	33,200	32,400	32,000	32,800	34,000	42,300	44,900	39,700	29,800	38,600	41,800	32,700	**	35,300
BIOLOGICAL SCIENTISTS....	31,600	31,800	31,400	32,400	31,000	41,700	43,400	39,100	28,800	35,900	37,200	32,600	**	33,500
AGRICULTURAL SCIENTISTS..	33,600	32,600	31,400	32,800	35,200	42,400	44,000	41,300	30,000	35,800	32,600	30,900	**	35,100
MEDICAL SCIENTISTS.......	37,900	35,300	35,000	35,300	37,700	43,000	46,700	38,500	33,900	45,900	46,300	36,700	**	39,500
PSYCHOLOGISTS.............	30,700	31,200	23,600	32,000	35,300	35,100	39,100	33,800	28,600	34,200	30,700	30,400	**	34,200
SOCIAL SCIENTISTS.........	30,800	33,400	31,000	35,800	**	38,500	42,600	37,100	29,000	34,300	30,900	33,100	**	32,600
ECONOMISTS...............	36,500	38,700	34,300	42,100	**	48,100	50,400	47,000	31,100	40,300	**	49,300	**	**
SOCIOLOGISTS/ANTHRO......	28,500	28,900	28,300	29,400	**	35,300	**	36,000	27,400	**	**	24,500	**	**
OTHER SOCIAL SCIENTISTS..	29,900	30,800	30,300	32,200	**	36,500	39,800	35,800	28,200	28,300	30,800	30,400	**	29,100

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SOURCE: NATIONAL SCIENCE FOUNDATION

FIELD	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
TOTAL....................	34,700	40,300	31,100	31,300	28,200	28,700	31,000	34,800	40,300	**	29,300	27,200	61,500	**	**
PHYSICAL SCIENTISTS.......	36,200	39,900	31,700	31,900	29,700	21,900	33,400	35,500	40,100	**	26,400	**	**	**	**
CHEMISTS..................	36,200	39,900	30,700	30,900	29,800	21,600	30,600	35,600	39,100	**	23,800	**	**	**	**
PHYSICISTS/ASTRONOMERS...	36,100	39,800	33,500	33,700	29,700	**	**	35,400	42,200	**	**	**	**	**	**
MATHEMATICAL SCIENTISTS...	31,300	37,100	30,500	30,600	25,500	**	**	36,000	40,200	**	**	**	**	**	**
MATHEMATICIANS............	30,900	36,800	30,400	30,600	25,500	**	**	36,000	40,800	**	**	**	**	**	**
STATISTICIANS.............	34,600	37,700	31,300	31,400	**	**	**	**	39,200	**	**	**	**	**	**
COMPUTER SPECIALISTS......	34,400	36,200	30,700	30,700	**	**	**	40,400	38,700	**	**	**	**	**	**
ENVIRONMENTAL SCIENTISTS..	36,500	40,800	31,200	31,300	**	**	**	37,800	40,700	**	27,800	**	**	**	**
EARTH SCIENTISTS..........	37,000	43,000	31,600	31,800	**	**	**	39,300	40,900	**	26,700	**	**	**	**
OCEANOGRAPHERS............	32,100	**	28,500	28,500	**	**	**	**	40,200	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS...	36,300	38,100	31,500	31,500	**	**	**	38,100	41,200	**	**	**	**	**	**
ENGINEERS..................	40,200	41,300	36,400	36,400	**	**	**	40,500	42,600	**	**	**	**	**	**
AERO/ASTRO ENGINEERS......	41,300	40,500	36,800	36,800	**	**	**	**	42,700	**	**	**	**	**	**
CHEMICAL ENGINEERS........	42,900	43,700	40,000	40,000	**	**	**	**	**	**	**	**	**	**	**
CIVIL ENGINEERS...........	36,800	40,500	33,900	33,900	**	**	**	**	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	41,100	43,900	37,900	37,900	**	**	**	**	40,600	**	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	40,000	40,000	39,700	39,700	**	**	**	**	40,000	**	**	**	**	**	**
MECHANICAL ENGINEERS......	38,700	40,200	36,700	36,700	**	**	**	**	**	**	**	**	**	**	**
NUCLEAR ENGINEERS.........	38,300	40,000	36,800	36,800	**	**	**	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	40,000	38,800	36,300	36,300	**	**	**	44,400	50,100	**	**	**	**	**	**
OTHER ENGINEERS...........	39,700	42,400	35,800	35,800	**	**	**	33,600	40,200	**	**	**	**	**	**
LIFE SCIENTISTS...........	33,200	39,700	31,000	31,100	26,700	**	35,600	33,000	38,300	**	29,500	31,200	**	**	**
BIOLOGICAL SCIENTISTS....	31,600	36,500	29,900	30,000	26,900	**	35,200	33,000	37,700	**	25,600	**	**	**	**
AGRICULTURAL SCIENTISTS..	33,600	36,200	31,400	31,400	**	**	**	33,800	38,500	**	29,800	**	**	**	**
MEDICAL SCIENTISTS.......	37,900	45,700	35,400	35,400	**	**	40,300	31,400	40,700	**	31,100	31,600	**	**	**
PSYCHOLOGISTS..............	30,700	40,300	29,100	29,000	28,400	30,400	30,100	28,600	39,000	**	29,200	27,100	**	**	**
SOCIAL SCIENTISTS..........	30,800	39,000	29,700	29,800	26,800	26,300	**	30,200	44,400	**	29,700	23,700	55,200	**	**
ECONOMISTS................	36,500	42,400	33,200	33,300	**	**	**	34,900	46,700	**	**	**	**	**	**
SOCIOLOGISTS/ANTHRO......	28,500	24,900	28,400	28,500	**	**	**	27,400	**	**	**	**	**	**	**
OTHER SOCIAL SCIENTISTS..	29,900	35,500	29,100	29,200	27,600	26,600	**	28,200	44,200	**	29,400	23,400	**	**	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE: 1981

FIELD	TOTAL	1 OR LESS YEARS	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40 OR MORE YEARS	NO REPORT
		YEARS OF PROFESSIONAL EXPERIENCE										
TOTAL....................	34,700	25,300	25,200	28,600	33,400	36,700	39,700	42,200	42,400	44,300	45,000	36,200
PHYSICAL SCIENTISTS.......	36,200	29,000	29,300	31,100	35,200	38,100	39,500	44,700	45,800	45,500	48,000	37,000
CHEMISTS..................	36,200	29,200	30,100	31,000	35,400	38,600	39,000	44,800	47,000	41,300	45,300	37,900
PHYSICISTS/ASTRONOMERS...	36,100	**	28,100	31,300	34,700	37,000	40,200	44,400	45,300	46,500	49,800	35,700
MATHEMATICAL SCIENTISTS...	31,300	**	20,700	25,300	30,100	32,900	36,400	38,200	42,000	40,900	42,800	33,200
MATHEMATICIANS............	30,900	**	20,600	24,800	29,600	32,200	36,400	36,700	41,900	42,100	**	32,700
STATISTICIANS.............	34,600	**	**	28,000	34,500	37,800	**	47,100	**	**	**	38,500
COMPUTER SPECIALISTS......	34,400	**	27,800	31,300	33,900	35,700	42,000	48,000	41,200	**	**	37,000
ENVIRONMENTAL SCIENTISTS..	36,500	**	26,700	31,400	34,600	39,100	40,900	46,200	42,800	50,200	50,300	39,700
EARTH SCIENTISTS..........	37,000	**	28,700	32,800	34,600	37,300	41,000	46,500	42,600	50,100	**	39,700
OCEANOGRAPHERS............	32,100	**	**	25,300	31,800	39,500	**	**	**	**	**	43,500
ATMOSPHERIC SCIENTISTS...	36,300	**	**	29,000	38,400	**	**	**	**	**	**	**
ENGINEERS.................	40,200	28,900	32,600	34,900	39,500	42,300	42,500	45,600	46,100	50,000	48,500	41,400
AERO/ASTRO ENGINEERS.....	41,300	**	**	**	**	41,400	**	**	**	**	**	**
CHEMICAL ENGINEERS.......	42,900	**	34,100	36,300	41,300	48,700	45,600	50,600	**	**	**	44,100
CIVIL ENGINEERS..........	36,800	**	**	33,100	37,900	44,800	34,400	**	**	**	**	37,600
ELEC./ELECTRON. ENGINEERS	41,100	**	32,900	36,700	41,100	45,100	46,000	41,700	44,500	**	**	40,900
MATERIALS SCI. ENGINEERS.	40,000	**	33,800	35,700	36,700	41,000	42,200	45,600	44,700	**	**	44,700
MECHANICAL ENGINEERS.....	38,700	**	**	34,600	37,900	40,600	41,700	**	**	**	**	40,200
NUCLEAR ENGINEERS........	38,300	**	**	**	38,900	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	40,000	**	32,800	33,800	40,400	42,600	48,100	**	**	**	**	41,300
OTHER ENGINEERS..........	39,700	**	32,300	33,600	37,600	40,700	41,200	45,700	48,800	50,700	**	38,900
LIFE SCIENTISTS...........	33,200	23,200	23,800	26,900	31,700	35,500	39,200	40,600	41,400	45,200	46,000	34,900
BIOLOGICAL SCIENTISTS....	31,600	20,700	22,200	25,900	30,300	34,100	38,500	40,500	41,200	44,100	46,400	32,900
AGRICULTURAL SCIENTISTS..	33,600	**	24,600	27,000	31,100	36,000	36,900	39,100	40,4[illegible]	4[illegible],800	34,900	34,700
MEDICAL SCIENTISTS.......	37,900	24,500	26,500	30,100	37,500	39,700	44,100	46,700	45,400	[illegible],800	50,500	40,400
PSYCHOLOGISTS.............	30,700	**	22,100	25,400	30,600	34,200	35,900	37,800	40,300	37,600	34,700	35,400
SOCIAL SCIENTISTS.........	30,800	20,500	22,800	25,100	30,000	33,900	34,800	37,400	42,000	39,500	40,200	31,400
ECONOMISTS................	36,500	**	28,700	29,100	36,300	38,800	40,300	37,900	49,900	**	**	37,500
SOCIOLOGISTS/ANTHRO......	28,500	**	21,000	24,000	26,700	33,200	33,700	32,400	40,600	**	**	30,200
OTHER SOCIAL SCIENTISTS..	29,900	**	21,700	24,800	28,800	32,000	34,200	38,700	39,200	39,800	36,800	30,300

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

GEOGRAPHIC DIVISION AND STATE	TOTAL	PHYSICAL SCIENTISTS			...MATH. SCIENTISTS....			COMPUTER SPECIALISTS	ENVIRONMENTAL SCIENTISTS			
		TOTAL	CHEMISTS	PHYSICISTS/ ASTRON.	TOTAL	MATH.	STAT.		TOTAL	EARTH SCI.	OCEAN.	ATMOS. SCI.
TOTAL....................	363,866	67,693	45,376	22,317	16,470	13,819	2,651	9,066	16,589	12,605	1,818	2,166
NEW ENGLAND..............	28,165	5,591	3,462	2,129	1,347	1,085	262	1,043	1,079	665	260	154
CONNECTICUT............	6,651	1,426	934	492	218	201	17	174	161	137	10	14
MAINE..................	1,350	175	83	92	64	58	6	23	67	43	24	*
MASSACHUSETTS..........	16,087	3,279	1,926	1,353	800	662	138	775	632	362	130	140
NEW HAMPSHIRE..........	1,027	114	50	64	48	48	*	29	76	33	43	*
RHODE ISLAND...........	1,745	396	301	95	150	79	71	42	118	65	53	*
VERMONT................	1,305	201	168	33	67	37	30	*	25	25	*	*
MIDDLE ATLANTIC..........	68,932	15,474	11,722	3,752	2,724	2,278	446	1,684	1,713	1,249	244	220
NEW JERSEY.............	16,006	4,699	3,720	979	493	356	107	510	322	204	105	13
NEW YORK...............	35,484	7,236	5,147	2,089	1,490	1,372	118	771	829	545	131	153
PENNSYLVANIA...........	17,442	3,539	2,855	684	741	520	221	403	562	500	8	54
EAST NORTH CENTRAL.......	54,735	10,980	8,247	2,733	2,540	2,150	390	1,329	1,469	1,268	11	190
ILLINOIS...............	16,060	2,680	1,971	709	712	599	113	532	377	307	*	70
INDIANA................	6,358	1,179	860	319	309	258	51	120	142	129	9	4
MICHIGAN...............	11,806	2,490	1,763	727	599	517	82	119	296	214	2	80
OHIO...................	14,366	3,635	2,971	664	605	519	86	401	365	365	*	*
WISCONSIN..............	6,145	996	682	314	315	257	58	157	289	253	*	36
WEST NORTH CENTRAL.......	22,494	3,293	2,287	1,006	1,248	1,062	186	503	689	522	31	136
IOWA...................	3,340	369	234	135	341	234	107	68	131	118	*	13
KANSAS.................	2,686	237	115	122	100	77	23	46	90	90	*	*
MINNESOTA..............	6,476	1,293	940	353	265	253	12	271	101	101	*	*
MISSOURI...............	6,054	960	692	268	302	276	26	63	194	152	*	42
NORTH DAKOTA...........	844	103	100	3	63	47	16	2	15	15	*	*
NEBRASKA...............	2,262	216	153	63	131	129	2	53	109	37	*	72
SOUTH DAKOTA...........	832	115	53	62	46	46	*	*	49	9	31	9
SOUTH ATLANTIC...........	65,832	12,748	8,216	4,532	3,340	2,572	768	1,629	2,969	1,966	523	480
DELAWARE...............	3,387	1,950	1,802	148	39	39	*	112	41	24	10	7
DISTRICT OF COLUMBIA..	12,646	1,945	953	992	669	444	225	247	664	454	108	102
FLORIDA................	8,713	1,271	953	318	404	325	79	146	388	198	133	57
GEORGIA................	5,135	831	491	340	269	188	81	181	228	159	55	14
MARYLAND...............	13,439	2,207	905	1,302	660	498	162	336	551	296	84	171
NORTH CAROLINA.........	7,610	1,394	1,118	276	358	266	92	172	217	106	40	71
SOUTH CAROLINA.........	3,256	699	504	195	169	135	34	67	116	82	26	8
VIRGINIA...............	9,837	1,892	999	893	732	647	85	362	728	611	67	50
WEST VIRGINIA..........	1,809	559	491	68	40	30	10	6	36	36	*	*
EAST SOUTH CENTRAL.......	15,198	2,441	1,647	794	1,025	917	108	126	472	381	54	37
ALABAMA................	3,351	454	235	219	204	203	1	6	84	68	16	*
KENTUCKY...............	3,533	547	443	104	300	280	20	23	64	56	8	*
MISSISSIPPI............	2,256	123	121	2	85	83	2	2	70	53	17	*
TENNESSEE..............	6,058	1,317	848	469	436	351	85	95	254	204	13	37
WEST SOUTH CENTRAL.......	27,368	3,963	3,274	689	1,360	1,252	108	433	2,567	2,299	145	123
ARKANSAS...............	1,587	212	212	*	74	60	14	9	57	57	*	*
LOUISIANA..............	4,097	594	540	54	294	294	*	84	240	186	45	9
OKLAHOMA...............	3,863	388	369	19	176	176	*	23	394	382	*	12
TEXAS..................	17,821	2,769	2,153	616	816	722	94	317	1,876	1,674	100	102
MOUNTAIN.................	22,577	3,415	1,392	2,023	926	776	150	686	2,373	1,929	11	433
ARIZONA................	3,848	391	143	248	125	123	2	115	334	310	*	24
COLORADO...............	7,678	947	477	470	216	206	10	203	1,283	936	11	336
IDAHO..................	1,381	127	78	49	57	29	28	11	92	92	*	*
MONTANA................	1,234	50	12	38	51	26	25	46	85	76	*	9
NEW MEXICO.............	4,227	1,516	475	1,041	226	181	45	165	249	205	*	44
NEVADA.................	659	91	36	55	97	80	17	30	49	39	*	10
UTAH...................	2,899	255	133	122	144	121	23	110	155	146	*	9
WYOMING................	651	38	38	*	10	10	*	6	126	125	*	1
PACIFIC..................	58,565	9,788	5,129	4,659	1,960	1,727	233	1,633	3,258	2,326	339	393
ALASKA.................	715	90	66	24	*	*	*	2	235	163	48	24
CALIFORNIA.............	44,200	8,052	4,132	3,920	1,351	1,178	173	1,419	2,364	1,798	259	307
HAWAII.................	1,652	206	126	80	36	34	2	3	92	57	35	*
OREGON.................	3,864	442	293	149	144	144	*	124	187	84	103	*
WASHINGTON.............	7,200	881	408	473	385	339	46	83	368	224	82	62
U.S. POSSESSIONS.......	934	117	104	13	44	32	12	2	12	*	12	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

CONTINUED

	ENGINEERS									
GEOGRAPHIC DIVISION AND STATE	TOTAL	AERO/ ASTRO	CHEM	CIVIL	ELEC./ ELECTRN	MAT'LS SCI	MECH	NUCLEAR	SYSTEMS DESIGN	OTHER ENGIN
TOTAL....................	58,311	2,536	7,612	6,032	10,834	6,238	5,577	2,061	5,366	12,055
NEW ENGLAND..............	4,359	148	488	507	939	314	642	24	359	938
CONNECTICUT............	830	16	17	93	223	43	190	21	55	172
MAINE..................	266	*	60	*	*	60	*	*	*	146
MASSACHUSETTS..........	2,716	97	376	245	566	195	401	3	304	529
NEW HAMPSHIRE..........	213	*	35	117	45	*	16	*	*	*
RHODE ISLAND...........	248	35	*	14	81	16	35	*	*	67
VERMONT................	86	*	*	38	24	*	*	*	*	24
MIDDLE ATLANTIC..........	11,826	204	1,757	927	1,988	1,873	1,004	401	1,474	2,198
NEW JERSEY.............	4,177	22	884	241	764	595	249	1	749	672
NEW YORK...............	4,874	91	577	490	1,008	521	485	247	401	1,054
PENNSYLVANIA...........	2,775	91	296	196	216	757	270	153	324	472
EAST NORTH CENTRAL.......	8,805	367	1,103	1,008	1,259	1,322	1,038	325	446	1,937
ILLINOIS...............	2,370	58	296	446	238	184	299	245	77	527
INDIANA................	986	88	20	83	328	222	76	*	77	92
MICHIGAN...............	1,961	*	184	196	224	256	221	*	141	739
OHIO...................	2,640	221	485	160	456	561	285	51	79	342
WISCONSIN..............	848	*	118	123	13	99	157	29	72	237
WEST NORTH CENTRAL.......	2,445	99	371	192	422	245	247	14	65	790
IOWA...................	272	16	*	*	53	*	17	*	*	186
KANSAS.................	281	16	35	92	34	*	76	*	28	*
MINNESOTA..............	530	*	30	37	104	173	59	*	35	92
MISSOURI...............	953	67	282	60	163	72	35	14	2	258
NORTH DAKOTA...........	83	*	*	*	*	*	44	*	*	39
NEBRASKA...............	264	*	24	3	52	*	16	*	*	169
SOUTH DAKOTA...........	62	*	*	*	16	*	*	*	*	46
SOUTH ATLANTIC...........	8,483	459	1,018	973	1,288	597	700	376	1,249	1,823
DELAWARE...............	540	*	409	*	*	18	44	*	4	65
DISTRICT OF COLUMBIA..	1,601	150	93	226	17	181	202	140	310	282
FLORIDA................	1,324	3	78	212	299	96	165	23	85	363
GEORGIA................	368	31	*	24	54	14	17	*	56	172
MARYLAND...............	1,600	149	35	95	409	66	104	22	271	449
NORTH CAROLINA.........	721	*	123	77	152	10	53	49	6	251
SOUTH CAROLINA.........	518	*	133	59	47	98	23	95	23	40
VIRGINIA...............	1,539	126	51	257	240	97	92	47	494	135
WEST VIRGINIA..........	272	*	96	23	70	17	*	*	*	66
EAST SOUTH CENTRAL.......	2,159	70	411	206	314	204	180	38	150	586
ALABAMA................	710	22	249	23	90	1	110	*	90	125
KENTUCKY...............	316	*	23	100	46	52	*	*	*	93
MISSISSIPPI............	256	46	*	25	44	24	23	*	2	92
TENNESSEE..............	879	2	139	58	134	127	47	38	58	276
WEST SOUTH CENTRAL.......	5,163	203	1,248	806	868	277	270	*	369	1,122
ARKANSAS...............	128	*	*	84	*	*	*	*	*	44
LOUISIANA..............	816	*	362	146	80	40	63	*	*	125
OKLAHOMA...............	625	35	164	88	86	44	22	*	31	155
TEXAS..................	3,594	168	722	488	702	193	185	*	338	798
MOUNTAIN.................	4,236	194	496	468	963	306	388	328	318	775
ARIZONA................	668	24	16	74	143	125	67	40	20	159
COLORADO...............	1,416	170	148	180	443	72	55	*	135	213
IDAHO..................	363	*	29	44	*	11	92	115	*	72
MONTANA................	56	*	*	40	*	16	*	*	*	*
NEW MEXICO.............	913	*	71	38	219	38	114	173	123	137
NEVADA.................	61	*	*	*	*	*	*	*	*	61
UTAH...................	643	*	232	69	114	44	60	*	*	124
WYOMING................	116	*	*	23	44	*	*	*	40	9
PACIFIC..................	10,835	792	720	945	2,793	1,100	1,108	555	936	1,886
ALASKA.................	22	*	*	16	*	*	*	*	*	6
CALIFORNIA.............	8,965	617	664	620	2,570	860	996	300	794	1,544
HAWAII.................	122	*	*	63	16	16	10	*	*	17
OREGON.................	356	44	*	67	50	110	*	36	*	49
WASHINGTON.............	1,256	131	50	175	150	111	102	219	63	255
U.S. POSSESSIONS.......	114	*	6	4	7	3	*	*	79	15

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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CONTINUED

GEOGRAPHIC DIVISION AND STATE	.......LIFE SCIENTISTS........ TOTAL	BIOL. SCI.	AGRIC. SCI.	MEDICAL SCI.	PSY-CHOL-OGISTS	......SOCIAL SCIENTISTS....... TOTAL	ECON-OMISTS	SOCIO/ ANTHRO.	OTHER
TOTAL....................	93,848	54,442	17,270	22,136	45,416	56,473	14,294	11,909	30,270
NEW ENGLAND..............	6,463	4,277	519	1,667	3,776	4,509	1,322	953	2,234
CONNECTICUT............	1,730	1,102	129	499	966	1,148	372	201	575
MAINE..................	381	206	152	23	225	149	66	71	12
MASSACHUSETTS..........	3,406	2,284	139	983	2,148	2,331	720	481	1,130
NEW HAMPSHIRE..........	240	137	58	45	132	175	19	56	100
RHODE ISLAND...........	315	211	18	86	166	310	41	70	199
VERMONT................	391	337	23	31	139	396	104	74	218
MIDDLE ATLANTIC..........	15,020	9,024	1,651	4,345	9,711	10,780	2,820	2,805	5,155
NEW JERSEY.............	2,568	1,428	445	695	1,456	1,781	557	486	738
NEW YORK...............	8,188	5,028	761	2,399	5,971	6,125	1,465	1,616	3,044
PENNSYLVANIA...........	4,264	2,568	445	1,251	2,284	2,874	798	703	1,373
EAST NORTH CENTRAL.......	13,854	7,727	2,324	3,803	6,763	8,995	1,991	1,959	5,045
ILLINOIS...............	4,189	2,319	602	1,268	2,006	3,194	974	537	1,683
INDIANA................	1,945	1,098	382	465	919	758	147	343	268
MICHIGAN...............	3,167	1,781	510	876	1,628	1,546	235	393	918
OHIO...................	2,767	1,527	378	862	1,629	2,324	416	554	1,354
WISCONSIN..............	1,786	1,002	452	332	581	1,173	219	132	822
WEST NORTH CENTRAL.......	8,042	4,282	2,208	1,552	2,610	3,664	856	977	1,831
IOWA...................	1,224	770	317	137	328	607	68	193	346
KANSAS.................	935	490	288	157	483	514	99	208	207
MINNESOTA..............	2,221	1,121	589	511	984	811	227	249	335
MISSOURI...............	1,809	1,068	347	394	551	1,222	376	189	657
NORTH DAKOTA...........	419	188	191	40	86	75	*	9	66
NEBRASKA...............	1,068	420	346	302	146	275	55	75	145
SOUTH DAKOTA...........	366	225	130	11	34	160	31	54	75
SOUTH ATLANTIC...........	18,305	10,428	3,757	4,120	7,018	11,340	3,432	1,610	6,298
DELAWARE...............	384	157	95	132	64	257	133	18	106
DISTRICT OF COLUMBIA..	2,401	1,154	761	486	538	4,581	1,963	312	2,306
FLORIDA................	2,144	1,152	484	508	1,702	1,334	222	177	935
GEORGIA................	1,931	1,134	413	384	846	481	198	118	165
MARYLAND...............	5,152	3,338	470	1,344	1,397	1,536	239	438	859
NORTH CAROLINA.........	2,736	1,446	564	726	1,036	976	251	259	466
SOUTH CAROLINA.........	1,091	559	389	143	267	329	148	41	140
VIRGINIA...............	1,901	1,094	487	320	1,067	1,616	264	196	1,156
WEST VIRGINIA..........	565	394	94	77	101	230	14	51	165
EAST SOUTH CENTRAL.......	4,745	2,825	954	966	1,953	2,277	517	424	1,336
ALABAMA................	1,195	710	214	271	395	303	29	133	141
KENTUCKY...............	966	480	214	272	571	748	215	133	400
MISSISSIPPI............	929	506	288	135	315	476	48	115	313
TENNESSEE..............	1,655	1,129	238	288	672	750	225	43	482
WEST SOUTH CENTRAL.......	7,738	4,309	1,642	1,787	2,761	3,383	812	629	1,942
ARKANSAS...............	679	250	315	114	191	237	89	68	80
LOUISIANA..............	1,201	683	326	192	318	550	113	223	214
OKLAHOMA...............	1,019	503	236	280	526	712	170	39	503
TEXAS..................	4,839	2,873	765	1,201	1,726	1,884	440	299	1,145
MOUNTAIN.................	5,464	2,925	1,632	907	2,467	3,010	630	725	1,655
ARIZONA................	1,080	573	245	262	575	560	99	112	349
COLORADO...............	1,815	884	559	372	825	973	339	201	433
IDAHO..................	421	181	214	26	167	143	90	*	53
MONTANA................	567	289	227	51	166	213	32	94	87
NEW MEXICO.............	582	353	142	87	230	346	*	97	249
NEVADA.................	87	67	7	13	70	174	70	88	16
UTAH...................	737	480	166	91	357	498	*	133	365
WYOMING................	175	98	72	5	77	103	*	*	103
PACIFIC..................	14,217	8,645	2,583	2,989	8,359	8,515	1,916	1,827	4,774
ALASKA.................	194	27	154	13	3	169	47	86	36
CALIFORNIA.............	9,654	6,189	1,235	2,230	6,621	5,774	1,269	1,175	3,330
HAWAII.................	528	295	120	113	120	545	94	91	360
OREGON.................	1,264	640	464	160	603	764	310	153	301
WASHINGTON.............	2,205	1,308	479	418	917	1,105	131	313	661
U.S. POSSESSIONS......	392	186	151	55	95	158	63	29	66

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1981

GEOGRAPHIC DIVISION AND STATE	TOTAL	PHYSICAL SCIENTISTS			...MATH. SCIENTISTS....			COM-PUTER SPECIAL-ISTS	ENVIRONMENTAL SCIENTISTS			
		TOTAL	CHEM-ISTS	PHYSI-CISTS/ ASTRON.	TOTAL	MATH.	STAT.		TOTAL	EARTH SCI.	OCEAN.	ATMOS. SCI.
TOTAL....................	34,700	36,200	36,200	36,100	31,300	30,900	34,600	34,400	36,500	37,000	32,100	36,300
NEW ENGLAND.............	32,400	35,100	35,600	33,700	30,000	31,000	26,400	31,200	33,500	37,200	29,400	**
CONNECTICUT............	34,400	36,800	37,600	34,600	31,200	31,400	**	**	**	**	**	**
MAINE..................	26,700	**	**	**	**	**	**	**	**	**	**	**
MASSACHUSETTS..........	33,200	35,200	35,400	34,600	30,900	30,800	**	32,600	35,300	39,600	**	**
NEW HAMPSHIRE..........	26,500	**	**	**	**	**	**	**	**	**	**	**
RHODE ISLAND...........	33,300	**	**	**	**	**	**	**	**	**	**	**
VERMONT................	25,500	**	**	**	**	**	**	**	**	**	**	**
MIDDLE ATLANTIC..........	35,900	37,100	37,900	36,300	35,200	34,100	40,200	38,700	34,800	34,800	**	**
NEW JERSEY.............	39,500	38,800	39,500	37,400	36,800	36,300	**	40,300	32,600	**	**	**
NEW YORK...............	34,500	36,600	38,000	36,000	34,800	34,100	**	37,500	31,800	34,600	**	**
PENNSYLVANIA...........	35,200	35,900	36,200	30,900	33,000	30,600	**	35,700	41,000	40,200	**	**
EAST NORTH CENTRAL.......	33,900	35,300	35,800	33,700	31,200	30,400	36,800	33,500	33,600	33,700	**	**
ILLINOIS...............	33,400	35,300	34,600	36,200	35,300	34,700	**	33,400	31,600	31,600	**	**
INDIANA................	33,200	35,600	35,900	**	27,500	28,500	**	**	**	**	**	**
MICHIGAN...............	35,200	37,500	41,000	32,200	30,000	29,800	**	**	34,100	34,000	**	**
OHIO...................	34,300	34,900	35,400	33,500	31,300	30,300	**	34,700	37,800	37,800	**	**
WISCONSIN..............	33,000	31,500	33,200	**	29,900	29,500	**	**	33,200	33,300	**	**
WEST NORTH CENTRAL.......	31,600	32,100	31,300	33,400	29,200	27,900	**	30,200	29,800	32,300	**	**
IOWA...................	29,900	28,500	**	**	27,800	**	**	**	**	**	**	**
KANSAS.................	30,400	**	**	**	**	**	**	**	**	**	**	**
MINNESOTA..............	33,100	32,300	32,200	**	34,400	34,600	**	27,800	**	**	**	**
MISSOURI...............	32,300	35,200	33,600	**	26,500	26,300	**	**	**	**	**	**
NORTH DAKOTA...........	32,400	**	**	**	**	**	**	**	**	**	**	**
NEBRASKA...............	30,800	**	**	**	**	**	**	**	**	**	**	**
SOUTH DAKOTA...........	27,100	**	**	**	**	**	**	**	**	**	**	**
SOUTH ATLANTIC...........	36,200	37,600	37,100	39,200	31,800	30,900	34,600	34,100	36,900	37,000	34,800	37,500
DELAWARE...............	43,600	46,000	46,100	**	**	**	**	**	**	**	**	**
DISTRICT OF COLUMBIA..	44,600	46,100	42,000	46,600	39,100	42,000	**	34,200	44,700	44,700	**	**
FLORIDA................	32,400	36,100	36,400	34,400	27,700	30,000	**	**	32,000	**	**	**
GEORGIA................	33,000	30,400	30,400	**	25,700	24,800	**	**	30,200	**	**	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 3-18. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS
CONTINUED BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1981

GEOGRAPHIC DIVISION AND STATE	TOTAL	PHYSICAL SCIENTISTS			...MATH. SCIENTISTS....			COM-PUTER SPECIAL-ISTS	ENVIRONMENTAL SCIENTISTS			
		TOTAL	CHEM-ISTS	PHYSI-CISTS/ ASTRON.	TOTAL	MATH.	STAT.		TOTAL	EARTH SCI.	OCEAN.	ATMOS. SCI.
MARYLAND..............	36,600	36,200	35,000	39,500	34,200	32,000	**	37,700	39,600	41,200	**	39,100
NORTH CAROLINA........	33,200	34,200	34,000	**	29,500	31,400	**	**	42,100	**	**	**
SOUTH CAROLINA........	33,400	33,600	37,100	**	**	**	**	**	**	**	**	**
VIRGINIA..............	34,700	36,600	35,200	39,400	29,800	29,600	**	37,500	37,400	37,400	**	**
WEST VIRGINIA.........	33,600	37,900	36,800	**	**	**	**	**	**	**	**	**
EAST SOUTH CENTRAL......	31,600	33,600	34,600	32,400	27,100	26,400	**	29,000	36,300	41,800	**	**
ALABAMA...............	34,000	32,900	**	**	28,000	28,000	**	**	**	**	**	**
KENTUCKY..............	30,400	34,900	37,500	**	23,900	23,200	**	**	**	**	**	**
MISSISSIPPI...........	30,300	**	**	**	**	**	**	**	**	**	**	**
TENNESSEE.............	32,200	33,300	34,600	32,500	30,400	30,000	**	**	**	**	**	**
WEST SOUTH CENTRAL......	34,300	33,900	33,900	33,800	30,500	30,200	**	34,600	39,700	40,200	**	**
ARKANSAS..............	27,300	**	**	**	**	**	**	**	**	**	**	**
LOUISIANA.............	33,300	33,100	32,700	**	32,800	32,800	**	**	34,400	**	**	**
OKLAHOMA..............	33,700	34,500	34,600	**	**	**	**	**	38,200	40,000	**	**
TEXAS.................	35,600	36,000	34,100	33,700	30,600	30,000	**	32,700	40,400	40,800	**	**
MOUNTAIN................	34,400	36,300	35,700	36,700	33,400	33,900	**	36,200	39,100	39,100	**	38,800
ARIZONA...............	36,100	32,800	**	**	**	**	**	**	41,500	41,500	**	**
COLORADO..............	35,200	32,700	31,900	32,800	37,100	37,100	**	**	40,600	40,500	**	**
IDAHO.................	31,300	**	**	**	**	**	**	**	**	**	**	**
MONTANA...............	28,200	**	**	**	**	**	**	**	**	**	**	**
NEW MEXICO............	37,900	40,200	40,700	39,400	32,800	**	**	**	37,700	36,100	**	**
NEVADA................	33,400	**	**	**	**	**	**	**	**	**	**	**
UTAH..................	32,900	**	**	**	**	**	**	**	**	**	**	**
WYOMING...............	33,800	**	**	**	**	**	**	**	**	**	**	**
PACIFIC.................	36,100	37,700	37,300	38,400	33,400	33,400	31,900	35,000	36,700	36,900	33,700	38,300
ALASKA................	47,800	**	**	**	**	**	**	**	52,200	**	**	**
CALIFORNIA............	37,300	38,100	37,400	40,100	34,600	34,300	36,900	35,500	38,200	39,100	36,200	39,200
HAWAII................	33,500	**	**	**	**	**	**	**	**	**	**	**
OREGON................	30,900	29,600	**	**	**	**	**	**	**	**	**	**
WASHINGTON............	32,500	35,700	**	35,700	33,000	33,300	**	**	32,900	34,000	**	**
U.S. POSSESSIONS......	25,900	**	**	**	**	**	**	**	**	**	**	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-18. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS
CONTINUED BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1981

GEOGRAPHIC DIVISION AND STATE	ENGINEERS TOTAL	AERO/ ASTRO	CHEM	CIVIL	ELEC./ ELECTRN	MAT'LS SCI	MECH	NUCLEAR	SYSTEMS DESIGN	OTHER ENGIN
TOTAL....................	40,200	41,300	42,900	36,800	41,100	40,000	38,700	38,300	40,000	39,700
NEW ENGLAND..............	38,800	**	**	**	41,600	**	37,300	**	36,800	39,600
CONNECTICUT............	39,900	**	**	**	**	**	**	**	**	**
MAINE..................	**	**	**	**	**	**	**	**	**	**
MASSACHUSETTS..........	37,200	**	**	**	43,200	**	**	**	36,100	42,100
NEW HAMPSHIRE..........	**	**	**	**	**	**	**	**	**	**
RHODE ISLAND...........	**	**	**	**	**	**	**	**	**	**
VERMONT................	**	**	**	**	**	**	**	**	**	**
MIDDLE ATLANTIC..........	40,900	**	42,300	40,300	44,100	42,100	40,600	**	38,700	44,000
NEW JERSEY.............	42,300	**	45,000	**	47,700	**	**	**	37,800	40,600
NEW YORK...............	41,000	**	**	38,900	39,800	40,100	**	**	**	45,600
PENNSYLVANIA...........	40,300	**	**	**	**	41,000	**	**	**	**
EAST NORTH CENTRAL.......	37,700	**	40,200	37,400	39,400	38,500	40,300	**	35,600	36,000
ILLINOIS...............	36,400	**	**	**	**	**	**	**	**	34,200
INDIANA................	36,200	**	**	**	**	**	**	**	**	**
MICHIGAN...............	38,100	**	**	**	**	**	**	**	**	38,800
OHIO...................	40,200	**	**	**	**	39,800	**	**	**	32,900
WISCONSIN..............	35,700	**	**	**	**	**	**	**	**	**
WEST NORTH CENTRAL.......	38,900	**	**	**	**	**	**	**	**	38,400
IOWA...................	**	**	**	**	**	**	**	**	**	**
KANSAS.................	**	**	**	**	**	**	**	**	**	**
MINNESOTA..............	45,000	**	**	**	**	**	**	**	**	**
MISSOURI...............	43,300	**	**	**	**	**	**	**	**	**
NORTH DAKOTA...........	**	**	**	**	**	**	**	**	**	**
NEBRASKA...............	**	**	**	**	**	**	**	**	**	**
SOUTH DAKOTA...........	**	**	**	**	**	**	**	**	**	**
SOUTH ATLANTIC...........	40,900	**	43,300	36,400	40,800	40,400	38,900	**	42,800	39,000
DELAWARE...............	**	**	**	**	**	**	**	**	**	**
DISTRICT OF COLUMBIA..	50,000	**	**	**	**	**	**	**	**	**
FLORIDA................	39,100	**	**	**	**	**	**	**	**	**
GEORGIA................	**	**	**	**	**	**	**	**	**	**

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TABLE B-18. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS
CONTINUED BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1981

GEOGRAPHIC DIVISION AND STATE	ENGINEERS									
	TOTAL	AERO/ ASTRO	CHEM	CIVIL	ELEC./ ELECTRN	MAT'LS SCI	MECH	NUCLEAR	SYSTEMS DESIGN	OTHER ENGIN
MARYLAND................	38,000	**	**	**	**	**	**	**	**	**
NORTH CAROLINA.........	35,900	**	**	**	**	**	**	**	**	**
SOUTH CAROLINA.........	40,800	**	**	**	**	**	**	**	**	**
VIRGINIA................	41,600	**	**	**	**	**	**	**	42,800	**
WEST VIRGINIA..........	**	**	**	**	**	**	**	**	**	**
EAST SOUTH CENTRAL......	38,100	**	**	**	**	**	**	**	**	42,600
ALABAMA.................	37,600	**	**	**	**	**	**	**	**	**
KENTUCKY................	**	**	**	**	**	**	**	**	**	**
MISSISSIPPI.............	**	**	**	**	**	**	**	**	**	**
TENNESSEE...............	38,100	**	**	**	**	**	**	**	**	**
WEST SOUTH CENTRAL......	41,000	**	44,600	36,500	36,900	**	**	**	**	40,200
ARKANSAS................	**	**	**	**	**	**	**	**	**	**
LOUISIANA...............	39,200	**	**	**	**	**	**	**	**	**
OKLAHOMA................	39,300	**	**	**	**	**	**	**	**	**
TEXAS...................	42,500	**	45,500	**	43,100	**	**	**	**	40,600
MOUNTAIN................	39,200	**	**	**	44,700	**	**	**	**	39,500
ARIZONA.................	42,700	**	**	**	**	**	**	**	**	**
COLORADO................	37,700	**	**	**	**	**	**	**	**	**
IDAHO...................	**	**	**	**	**	**	**	**	**	**
MONTANA.................	**	**	**	**	**	**	**	**	**	**
NEW MEXICO..............	40,300	**	**	**	**	**	**	**	**	**
NEVADA..................	**	**	**	**	**	**	**	**	**	**
UTAH....................	**	**	**	**	**	**	**	**	**	**
WYOMING.................	**	**	**	**	**	**	**	**	**	**
PACIFIC.................	40,500	42,600	44,400	36,300	41,700	38,400	40,000	37,800	42,400	40,400
ALASKA..................	**	**	**	**	**	**	**	**	**	**
CALIFORNIA..............	42,300	42,600	44,500	39,000	42,700	38,900	40,500	**	44,200	44,000
HAWAII..................	**	**	**	**	**	**	**	**	**	**
OREGON..................	**	**	**	**	**	**	**	**	**	**
WASHINGTON..............	33,900	**	**	**	**	**	**	**	**	**
U.S. POSSESSIONS......	**	**	**	**	**	**	**	**	**	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-18. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS
CONTINUED BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1981

GEOGRAPHIC DIVISION AND STATE	........LIFE SCIENTISTS.........				PSY- CHOL- OGISTS	......SOCIAL SCIENTISTS.......			
	TOTAL	BIOL. SCI.	AGRIC. SCI.	MEDICAL SCI.		TOTAL	ECON- OMISTS	SOCIO/ ANTHRO.	OTHER
TOTAL....................	33,200	31,600	33,600	37,900	30,700	30,800	36,500	28,500	29,900
NEW ENGLAND.............	30,100	27,300	30,500	36,700	28,000	29,100	32,200	33,100	28,000
CONNECTICUT............	31,500	29,600	**	35,500	31,100	28,600	**	**	**
MAINE..................	22,500	**	**	**	**	**	**	**	**
MASSACHUSETTS..........	30,300	27,500	**	36,700	28,000	30,700	35,000	33,100	29,100
NEW HAMPSHIRE..........	38,000	**	**	**	**	**	**	**	**
RHODE ISLAND...........	30,500	**	**	**	**	**	**	**	**
VERMONT................	23,600	**	**	**	**	**	**	**	**
MIDDLE ATLANTIC..........	34,800	32,700	34,600	39,400	31,100	30,400	36,200	26,600	29,900
NEW JERSEY.............	39,800	37,600	36,700	45,700	34,500	32,300	**	26,400	28,500
NEW YORK...............	33,600	32,300	30,600	38,800	30,500	30,200	36,000	29,100	30,000
PENNSYLVANIA...........	33,500	30,400	37,400	37,000	30,900	30,300	35,700	25,700	26,900
EAST NORTH CENTRAL......	34,400	32,300	35,700	38,600	29,900	30,400	31,400	27,600	31,000
ILLINOIS...............	33,000	31,400	34,700	38,200	30,300	29,800	30,900	26,200	29,400
INDIANA................	36,200	30,900	39,800	41,500	28,100	29,800	**	**	**
MICHIGAN...............	35,600	34,500	35,900	40,000	31,500	32,100	**	26,500	33,500
OHIO...................	33,900	32,500	34,400	38,600	30,300	29,900	**	31,500	28,300
WISCONSIN..............	33,200	32,400	35,300	32,500	28,700	31,400	**	**	35,900
WEST NORTH CENTRAL......	32,000	30,800	31,700	38,100	30,800	27,400	33,700	27,300	25,900
IOWA...................	32,200	26,900	33,100	**	29,900	29,400	**	**	**
KANSAS.................	30,600	29,300	30,400	38,000	32,600	26,500	**	**	**
MINNESOTA..............	33,600	32,000	32,500	45,400	32,000	26,400	**	**	**
MISSOURI...............	31,900	31,500	30,800	32,700	27,300	29,500	**	**	27,600
NORTH DAKOTA...........	34,800	**	**	**	**	**	**	**	**
NEBRASKA...............	31,500	28,400	32,200	32,600	**	**	**	**	**
SOUTH DAKOTA...........	27,500	**	**	**	**	**	**	**	**
SOUTH ATLANTIC...........	34,800	33,300	35,400	38,700	31,500	36,100	44,000	28,400	33,300
DELAWARE...............	40,700	**	**	**	**	**	**	**	**
DISTRICT OF COLUMBIA..	40,700	35,900	45,100	42,500	37,800	45,900	50,000	**	44,100
FLORIDA................	30,700	29,200	31,900	30,800	29,700	26,500	**	**	24,900
GEORGIA................	35,200	33,700	34,300	44,700	30,800	32,800	**	**	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-18. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS
CONTINUED BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1981

GEOGRAPHIC DIVISION AND STATE	.......LIFE SCIENTISTS........				PSY-	......SOCIAL SCIENTISTS.......			
	TOTAL	BIOL. SCI.	AGRIC. SCI.	MEDICAL SCI.	CHOL-OGISTS	TOTAL	ECON-OMISTS	SOCIO/ ANTHRO.	OTHER
MARYLAND...............	37,500	36,700	37,800	39,500	33,700	34,900	**	31,200	39,100
NORTH CAROLINA.........	32,500	29,100	34,300	37,700	25,800	31,300	**	**	29,600
SOUTH CAROLINA.........	29,900	29,500	30,000	**	**	**	**	**	**
VIRGINIA...............	29,700	29,600	29,000	31,500	30,700	29,200	**	**	29,400
WEST VIRGINIA..........	31,900	32,300	**	**	**	**	**	**	**
EAST SOUTH CENTRAL......	30,200	29,200	32,000	35,100	28,400	30,500	**	26,900	30,400
ALABAMA................	32,800	29,700	**	36,300	26,300	**	**	**	**
KENTUCKY...............	29,200	28,100	34,500	29,900	26,500	25,500	**	**	32,200
MISSISSIPPI............	30,900	29,400	31,800	35,900	**	**	**	**	**
TENNESSEE..............	30,200	29,200	**	33,600	30,000	32,500	**	**	30,900
WEST SOUTH CENTRAL......	32,500	29,500	33,000	37,300	30,900	28,100	36,000	26,100	26,800
ARKANSAS...............	28,300	25,600	**	**	**	**	**	**	**
LOUISIANA..............	30,700	28,500	30,300	34,900	33,200	26,600	**	**	**
OKLAHOMA...............	32,500	28,900	**	36,200	31,800	28,900	**	**	**
TEXAS..................	33,400	31,100	33,300	40,200	30,700	28,500	**	26,400	27,000
MOUNTAIN................	31,200	30,200	31,900	34,500	30,800	30,200	**	30,200	28,500
ARIZONA................	35,500	38,500	**	39,700	32,900	28,700	**	**	**
COLORADO...............	31,500	28,500	33,700	32,800	35,100	27,600	**	**	27,300
IDAHO..................	30,300	**	**	**	**	**	**	**	**
MONTANA................	28,000	**	**	**	**	**	**	**	**
NEW MEXICO.............	31,100	31,700	**	**	**	**	**	**	**
NEVADA.................	**	**	**	**	**	**	**	**	**
UTAH...................	30,700	30,300	**	**	32,000	**	**	**	**
WYOMING................	**	**	**	**	**	**	**	**	**
PACIFIC.................	33,300	32,600	33,500	36,800	33,700	33,500	41,600	30,200	31,500
ALASKA.................	**	**	**	**	**	**	**	**	**
CALIFORNIA.............	34,300	33,500	34,800	37,700	35,000	34,300	42,700	31,800	31,800
HAWAII.................	33,000	33,000	**	**	**	33,900	**	**	**
OREGON.................	32,200	30,800	34,000	**	28,900	28,400	**	**	**
WASHINGTON.............	32,300	31,800	30,900	37,200	27,800	28,900	**	**	29,700
U.S. POSSESSIONS.......	24,100	**	**	**	**	**	**	**	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 8-19. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE UNIVERSITY OR FOUR-YEAR COLLEGE TEACHERS BY FIELD, SEX, AND ACADEMIC RANK: 1981

FIELD AND SEX	TOTAL	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	OTHER	NO REPORT
ALL FIELDS							
TOTAL......................	130,372	57,136	38,214	28,655	1,235	4,806	326
MEN......................	113,991	53,918	33,536	22,056	776	3,555	150
WOMEN......................	16,381	3,218	4,678	6,599	459	1,251	176
PHYSICAL SCIENTISTS							
TOTAL......................	18,480	9,938	4,802	2,701	134	844	61
MEN......................	17,364	9,607	4,508	2,408	66	726	49
WOMEN......................	1,116	331	294	293	68	118	12
CHEMISTS							
TOTAL......................	10,964	5,871	2,622	1,749	78	587	57
MEN......................	10,014	5,589	2,372	1,504	16	484	49
WOMEN......................	950	282	250	245	62	103	8
PHYSICISTS/ASTRONOMERS							
TOTAL......................	7,516	4,067	2,180	952	56	257	4
MEN......................	7,350	4,018	2,136	904	50	242	*
WOMEN......................	166	49	44	48	6	15	4
MATHEMATICAL SCIENTISTS							
TOTAL......................	10,821	4,954	3,362	2,123	160	197	25
MEN......................	9,934	4,768	3,101	1,765	126	154	20
WOMEN......................	887	186	261	358	34	43	5
MATHEMATICIANS							
TOTAL......................	9,343	4,291	2,962	1,739	154	180	17
MEN......................	8,620	4,121	2,741	1,480	126	140	12
WOMEN......................	723	170	221	259	28	40	5
STATISTICIANS							
TOTAL......................	1,478	663	400	384	6	17	8
MEN......................	1,314	647	360	285	*	14	8
WOMEN......................	164	16	40	99	6	3	*
COMPUTER SPECIALISTS							
TOTAL......................	1,950	579	717	549	30	75	*
MEN......................	1,798	565	665	473	24	71	*
WOMEN......................	152	14	52	76	6	4	*
ENVIRONMENTAL SCIENTISTS							
TOTAL......................	4,427	1,972	1,319	1,045	6	85	*
MEN......................	4,200	1,940	1,243	934	6	77	*
WOMEN......................	227	32	76	111	*	8	*
EARTH SCIENTISTS							
TOTAL......................	3,446	1,656	1,085	640	6	59	*
MEN......................	3,286	1,632	1,026	571	6	51	*
WOMEN......................	160	24	59	69	*	8	*
OCEANOGRAPHERS							
TOTAL......................	486	142	136	196	*	12	*
MEN......................	439	134	128	165	*	12	*
WOMEN......................	47	8	8	31	*	*	*
ATMOSPHERIC SCIENTISTS							
TOTAL......................	495	174	98	209	*	14	*
MEN......................	475	174	89	198	*	14	*
WOMEN......................	20	*	9	11	*	*	*
ENGINEERS							
TOTAL......................	13,190	7,212	3,684	1,940	*	354	*
MEN......................	13,043	7,183	3,644	1,864	*	352	*
WOMEN......................	147	29	40	76	*	2	*
AERO/ASTRO ENGINEERS							
TOTAL......................	526	329	132	42	*	23	*
MEN......................	522	325	132	42	*	23	*
WOMEN......................	4	4	*	*	*	*	*
CHEMICAL ENGINEERS							
TOTAL......................	1,065	618	171	258	*	18	*
MEN......................	1,054	618	171	248	*	17	*
WOMEN......................	11	*	*	10	*	1	*
CIVIL ENGINEERS							
TOTAL......................	2,330	1,010	898	422	*	*	*
MEN......................	2,300	1,010	890	400	*	*	*
WOMEN......................	30	*	8	22	*	*	*
ELEC./ELECTRON. ENGINEERS							
TOTAL......................	2,840	1,524	862	365	*	89	*
MEN......................	2,807	1,512	853	353	*	89	*
WOMEN......................	33	12	9	12	*	*	*
MATERIALS SCI. ENGINEERS							
TOTAL......................	1,092	730	169	142	*	51	*
MEN......................	1,077	728	160	138	*	51	*
WOMEN......................	15	2	9	4	*	*	*
MECHANICAL ENGINEERS							
TOTAL......................	1,823	1,023	580	219	*	1	*
MEN......................	1,807	1,020	574	213	*	*	*
WOMEN......................	16	3	6	6	*	1	*
NUCLEAR ENGINEERS							
TOTAL......................	155	109	22	24	*	*	*
MEN......................	155	109	22	24	*	*	*
WOMEN......................	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS							
TOTAL......................	702	271	171	238	*	22	*
MEN......................	684	263	168	231	*	22	*
WOMEN......................	18	8	3	7	*	*	*
OTHER ENGINEERS							
TOTAL......................	2,657	1,598	679	230	*	150	*
MEN......................	2,637	1,598	674	215	*	150	*
WOMEN......................	20	*	5	15	*	*	*

* NO CASES REPORTED

TABLE B-19. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE UNIVERSITY OR
CONTINUED FOUR-YEAR COLLEGE TEACHERS BY FIELD, SEX, AND ACADEMIC RANK: 1981

FIELD AND SEX	TOTAL	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUC-TOR	OTHER	NO REPORT
LIFE SCIENTISTS							
TOTAL......................	34,675	13,650	10,369	8,369	531	1,646	110
MEN......................	29,404	12,695	8,754	6,374	353	1,174	54
WOMEN....................	5,271	955	1,615	1,995	178	472	56
BIOLOGICAL SCIENTISTS							
TOTAL......................	22,821	8,682	7,181	5,500	346	1,043	69
MEN......................	19,112	7,989	6,089	4,098	226	667	43
WOMEN....................	3,709	693	1,092	1,402	120	376	26
AGRICULTURAL SCIENTISTS							
TOTAL......................	5,080	2,598	1,233	1,104	*	145	*
MEN......................	4,952	2,578	1,216	1,013	*	145	*
WOMEN....................	128	20	17	91	*	*	*
MEDICAL SCIENTISTS							
TOTAL......................	6,774	2,370	1,955	1,765	185	458	41
MEN......................	5,340	2,128	1,449	1,263	127	362	11
WOMEN....................	1,434	242	506	502	58	96	30
PSYCHOLOGISTS							
TOTAL......................	15,025	5,830	4,366	3,928	101	700	100
MEN......................	11,324	5,078	3,491	2,323	29	389	14
WOMEN....................	3,701	752	875	1,603	72	311	86
SOCIAL SCIENTISTS							
TOTAL......................	31,804	13,001	9,595	8,000	273	905	30
MEN......................	26,924	12,082	8,130	5,915	172	612	13
WOMEN....................	4,880	919	1,465	2,085	101	293	17
ECONOMISTS							
TOTAL......................	7,618	3,665	1,847	1,995	91	17	3
MEN......................	7,033	3,516	1,663	1,786	68	*	*
WOMEN....................	585	149	184	209	23	17	3
SOCIOLOGISTS/ANTHRO.							
TOTAL......................	7,525	2,503	2,628	2,078	39	269	8
MEN......................	5,572	2,160	1,998	1,255	27	132	*
WOMEN....................	1,953	343	630	823	12	137	8
OTHER SOCIAL SCIENTISTS							
TOTAL......................	16,661	6,833	5,120	3,927	143	619	19
MEN......................	14,319	6,406	4,469	2,874	77	480	13
WOMEN....................	2,342	427	651	1,053	66	139	6

* NO CASES REPORTED

NOTE: INCLUDES INDIVIDUALS REPORTING TEACHING AS THEIR PRIMARY OR SECONDARY WORK ACTIVITIES

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-20. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE UNIVERSITY OR FOUR-YEAR COLLEGE TEACHERS BY FIELD, SALARY BASE, AND ACADEMIC RANK: 1981

FIELD AND SALARY BASE	TOTAL	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	OTHER	NO REPORT
ALL FIELDS							
ACADEMIC YEAR...........	25,200	30,800	24,000	19,300	14,200	20,400	**
CALENDAR YEAR...........	31,900	39,100	30,300	24,700	21,800	28,900	**
PHYSICAL SCIENTISTS							
ACADEMIC YEAR...........	25,700	30,500	23,600	18,800	**	**	**
CALENDAR YEAR...........	32,100	36,100	30,300	22,700	**	27,900	**
CHEMISTS							
ACADEMIC YEAR...........	25,100	29,100	23,200	18,600	**	**	**
CALENDAR YEAR...........	31,600	35,800	30,600	20,000	**	27,300	**
PHYSICISTS/ASTRONOMERS							
ACADEMIC YEAR...........	26,800	31,300	23,700	19,000	**	**	**
CALENDAR YEAR...........	32,500	36,900	30,000	24,700	**	**	**
MATHEMATICAL SCIENTISTS							
ACADEMIC YEAR...........	25,400	30,600	23,900	18,700	**	**	**
CALENDAR YEAR...........	27,700	36,300	26,900	22,100	**	**	**
MATHEMATICIANS							
ACADEMIC YEAR...........	25,400	30,200	23,900	18,400	**	**	**
CALENDAR YEAR...........	27,600	36,300	26,900	21,100	**	**	**
STATISTICIANS							
ACADEMIC YEAR...........	25,700	36,000	24,300	19,800	**	**	**
CALENDAR YEAR...........	33,600	**	**	**	**	**	**
COMPUTER SPECIALISTS							
ACADEMIC YEAR...........	25,200	30,700	24,800	23,100	**	**	**
CALENDAR YEAR...........	30,600	**	**	**	**	**	**
ENVIRONMENTAL SCIENTISTS							
ACADEMIC YEAR...........	25,100	31,500	23,900	19,800	**	**	**
CALENDAR YEAR...........	30,600	38,200	31,200	21,900	**	**	**
EARTH SCIENTISTS							
ACADEMIC YEAR...........	25,200	30,600	23,500	19,600	**	**	**
CALENDAR YEAR...........	31,500	36,500	31,200	**	**	**	**
OCEANOGRAPHERS							
ACADEMIC YEAR...........	23,900	**	**	**	**	**	**
CALENDAR YEAR...........	28,000	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS							
ACADEMIC YEAR...........	28,300	**	**	**	**	**	**
CALENDAR YEAR...........	**	**	**	**	**	**	**
ENGINEERS							
ACADEMIC YEAR...........	29,100	34,000	27,600	23,200	**	**	**
CALENDAR YEAR...........	36,900	46,000	33,600	27,400	**	**	**
AERO/ASTRO ENGINEERS							
ACADEMIC YEAR...........	**	**	**	**	**	**	**
CALENDAR YEAR...........	**	**	**	**	**	**	**
CHEMICAL ENGINEERS							
ACADEMIC YEAR...........	31,700	**	**	**	**	**	**
CALENDAR YEAR...........	**	**	**	**	**	**	**
CIVIL ENGINEERS							
ACADEMIC YEAR...........	28,100	32,800	25,900	22,500	**	**	**
CALENDAR YEAR...........	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS							
ACADEMIC YEAR...........	29,800	35,600	26,800	**	**	**	**
CALENDAR YEAR...........	39,100	**	**	**	**	**	**
MATERIALS SCI. ENGINEERS							
ACADEMIC YEAR...........	30,300	34,100	**	**	**	**	**
CALENDAR YEAR...........	**	**	**	**	**	**	**
MECHANICAL ENGINEERS							
ACADEMIC YEAR...........	30,700	33,200	28,200	**	**	**	**
CALENDAR YEAR...........	**	**	**	**	**	**	**
NUCLEAR ENGINEERS							
ACADEMIC YEAR...........	**	**	**	**	**	**	**
CALENDAR YEAR...........	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS							
ACADEMIC YEAR...........	28,700	**	**	**	**	**	**
CALENDAR YEAR...........	**	**	**	**	**	**	**
OTHER ENGINEERS							
ACADEMIC YEAR...........	27,900	31,200	**	**	**	**	**
CALENDAR YEAR...........	35,100	38,900	**	**	**	**	**
LIFE SCIENTISTS							
ACADEMIC YEAR...........	23,600	28,800	23,000	19,000	**	**	**
CALENDAR YEAR...........	32,300	41,600	30,800	25,800	20,900	30,400	**
BIOLOGICAL SCIENTISTS							
ACADEMIC YEAR...........	23,400	28,900	22,700	18,600	**	**	**
CALENDAR YEAR...........	31,100	43,700	30,500	25,600	**	27,200	**
AGRICULTURAL SCIENTISTS							
ACADEMIC YEAR...........	23,400	28,700	**	21,000	**	**	**
CALENDAR YEAR...........	31,900	35,600	29,500	24,000	**	**	**
MEDICAL SCIENTISTS							
ACADEMIC YEAR...........	25,300	28,200	25,200	21,700	**	**	**
CALENDAR YEAR...........	35,800	39,700	33,500	28,000	**	30,800	**
PSYCHOLOGISTS							
ACADEMIC YEAR...........	23,800	30,700	22,500	18,200	**	**	**
CALENDAR YEAR...........	28,900	38,400	28,800	23,600	**	23,200	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

TABLE B-20. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE UNIVERSITY OR
CONTINUED FOUR-YEAR COLLEGE TEACHERS BY FIELD, SALARY BASE, AND ACADEMIC RANK: 1981

FIELD AND SALARY BASE	TOTAL	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	OTHER	NO REPORT
SOCIAL SCIENTISTS							
ACADEMIC YEAR...........	24,500	30,900	23,900	19,100	**	**	**
CALENDAR YEAR...........	28,300	37,500	26,400	20,500	**	23,700	**
ECONOMISTS							
ACADEMIC YEAR...........	26,800	32,900	26,700	20,200	**	**	**
CALENDAR YEAR...........	29,700	38,400	**	**	**	**	**
SOCIOLOGISTS/ANTHRO.							
ACADEMIC YEAR...........	23,200	30,400	23,100	18,400	**	**	**
CALENDAR YEAR...........	26,900	38,500	27,400	20,000	**	**	**
OTHER SOCIAL SCIENTISTS							
ACADEMIC YEAR...........	24,100	30,300	22,900	18,800	**	**	**
CALENDAR YEAR...........	26,700	36,600	25,200	20,300	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: INCLUDES INDIVIDUALS REPORTING TEACHING AS THEIR PRIMARY OR SECONDARY WORK ACTIVITIES
MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS.

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-21. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND EMPLOYMENT STATUS: 1981

FIELD AND RACE	TOTAL	EMPLOYED FULL-TIME			EMPLOYED PART-TIME			POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
		TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD						
ALL FIELDS													
TOTAL......................	45,747	33,581	29,913	3,668	4,585	4,035	550	2,776	983	1,793	1,686	117	226
WHITE....................	40,653	29,693	26,438	3,255	4,306	3,787	519	2,318	852	1,657	1,554	89	184
BLACK....................	1,098	958	814	144	39	24	15	40	15	9	21	9	7
AM. INDIAN/ALSKN NATIVE	320	240	221	19	25	25	•	44	•	6	5	•	•
ASIAN/PACIFIC ISLANDER.	3,113	2,276	2,069	207	162	153	9	373	106	121	32	8	35
NO REPORT..............	563	414	371	43	53	46	7	1	10	•	74	11	•
PHYSICAL SCIENTISTS													
TOTAL......................	4,354	3,055	2,681	374	371	302	69	344	83	287	182	12	20
WHITE....................	3,540	2,447	2,150	297	335	269	66	244	63	247	172	12	20
BLACK....................	41	41	36	5	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	8	8	3	5	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	696	503	446	57	31	28	3	99	16	40	7	•	•
NO REPORT..............	69	56	46	10	5	5	•	1	4	•	3	•	•
CHEMISTS													
TOTAL......................	3,658	2,557	2,241	316	293	228	65	310	68	258	147	8	17
WHITE....................	2,935	2,011	1,765	246	266	204	62	215	51	228	139	8	17
BLACK....................	34	34	29	5	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	8	8	3	5	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	617	451	401	50	22	19	3	95	13	30	6	•	•
NO REPORT..............	64	53	43	10	5	5	•	•	4	•	2	•	•
PHYSICISTS/ASTRONOMERS													
TOTAL......................	696	498	440	58	78	74	4	34	15	29	35	4	3
WHITE....................	605	436	385	51	69	65	4	29	12	19	33	4	3
BLACK....................	7	7	7	•	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	•	•	•	•	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	79	52	45	7	9	9	•	4	3	10	1	•	•
NO REPORT..............	5	3	3	•	•	•	•	1	•	•	1	•	•
MATHEMATICAL SCIENTISTS													
TOTAL......................	1,463	1,179	1,086	93	130	110	20	6	18	63	64	•	3
WHITE....................	1,232	971	892	79	123	103	20	6	16	54	61	•	1
BLACK....................	17	17	16	1	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	20	20	18	2	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	178	160	149	11	5	5	•	•	2	9	•	•	2
NO REPORT..............	16	11	11	•	2	2	•	•	•	•	3	•	•
MATHEMATICIANS													
TOTAL......................	1,166	925	836	89	108	90	18	6	13	51	60	•	3
WHITE....................	1,015	790	713	77	101	83	18	6	13	47	57	•	1
BLACK....................	17	17	16	1	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	2	2	•	2	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	116	105	96	9	5	5	•	•	•	4	•	•	2
NO REPORT..............	16	11	11	•	2	2	•	•	•	•	3	•	•
STATISTICIANS													
TOTAL......................	297	254	250	4	22	20	2	•	5	12	4	•	•
WHITE....................	217	181	179	2	22	20	2	•	3	7	4	•	•
BLACK....................	•	•	•	•	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	18	18	18	•	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	62	55	53	2	•	•	•	•	2	5	•	•	•
NO REPORT..............	•	•	•	•	•	•	•	•	•	•	•	•	•
COMPUTER SPECIALISTS													
TOTAL......................	714	623	617	6	77	77	•	1	3	9	•	•	1
WHITE....................	589	500	494	6	75	75	•	1	3	9	•	•	1
BLACK....................	3	3	3	•	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	3	3	3	•	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	97	97	97	•	•	•	•	•	•	•	•	•	•
NO REPORT..............	22	20	20	•	2	2	•	•	•	•	•	•	•
ENVIRONMENTAL SCIENTISTS													
TOTAL......................	906	749	713	36	85	82	3	29	10	20	11	1	1
WHITE....................	833	698	663	35	80	77	3	17	6	20	10	1	1
BLACK....................	10	10	10	•	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	5	5	5	•	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	50	31	30	1	5	5	•	12	2	•	•	•	•
NO REPORT..............	8	5	5	•	•	•	•	•	2	•	1	•	•
EARTH SCIENTISTS													
TOTAL......................	615	514	487	27	52	50	2	12	10	15	11	•	1
WHITE....................	578	486	460	26	52	50	2	8	6	15	10	•	1
BLACK....................	8	8	8	•	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	5	5	5	•	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	16	10	9	1	•	•	•	4	2	•	•	•	•
NO REPORT..............	8	5	5	•	•	•	•	•	2	•	1	•	•
OCEANOGRAPHERS													
TOTAL......................	206	170	161	9	24	24	•	9	•	2	•	1	•
WHITE....................	197	161	152	9	24	24	•	9	•	2	•	1	•
BLACK....................	2	2	2	•	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	•	•	•	•	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	7	7	7	•	•	•	•	•	•	•	•	•	•
NO REPORT..............	•	•	•	•	•	•	•	•	•	•	•	•	•
ATMOSPHERIC SCIENTISTS													
TOTAL......................	85	65	65	•	9	8	1	8	•	3	•	•	•
WHITE....................	58	51	51	•	4	3	1	•	•	3	•	•	•
BLACK....................	•	•	•	•	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	•	•	•	•	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	27	14	14	•	5	5	•	8	•	•	•	•	•
NO REPORT..............	•	•	•	•	•	•	•	•	•	•	•	•	•
ENGINEERS													
TOTAL......................	783	698	682	16	51	44	7	10	4	11	2	5	2
WHITE....................	623	557	541	16	42	35	7	8	•	9	2	3	2
BLACK....................	7	7	7	•	•	•	•	•	•	•	•	•	•
AM. INDIAN/ALSKN NATIVE	14	14	14	•	•	•	•	•	•	•	•	•	•
ASIAN/PACIFIC ISLANDER.	127	110	110	•	7	7	•	2	4	2	•	2	•
NO REPORT..............	12	10	10	•	2	2	•	•	•	•	•	•	•

* NO CASES REPORTED

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TABLE 9-21. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND EMPLOYMENT STATUS: 1981
CONTINUED

		EMPLOYED FULL-TIME			EMPLOYED PART-TIME								
FIELD AND RACE	TOTAL	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
AERO/ASTRO ENGINEERS													
TOTAL......................	40	38	38	*	*	*	*	*	*	2	*	*	*
WHITE......................	21	19	19	*	*	*	*	*	*	2	*	*	*
BLACK......................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	17	17	17	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS													
TOTAL......................	59	48	47	1	4	4	*	2	1	4	*	*	*
WHITE......................	42	36	35	1	4	4	*	*	*	2	*	*	*
BLACK......................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	17	12	12	*	*	*	*	2	1	2	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS													
TOTAL......................	95	80	80	*	13	6	7	2	*	*	*	*	*
WHITE......................	65	75	75	*	8	1	7	2	*	*	*	*	*
BLACK......................	1	1	1	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	9	4	4	*	5	5	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL......................	139	130	128	2	9	9	*	*	*	*	*	*	*
WHITE......................	118	109	107	2	9	9	*	*	*	*	*	*	*
BLACK......................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	17	17	17	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	2	2	2	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS													
TOTAL......................	105	94	90	4	4	4	*	2	*	3	2	*	*
WHITE......................	79	70	66	4	2	2	*	2	*	3	2	*	*
BLACK......................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	7	7	7	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	13	13	13	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	6	4	4	*	2	2	*	*	*	*	*	*	*
MECHANICAL ENGINEERS													
TOTAL......................	40	30	26	4	10	10	*	*	*	*	*	*	*
WHITE......................	36	26	22	4	10	10	*	*	*	*	*	*	*
BLACK......................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	2	2	2	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL......................	18	18	18	*	*	*	*	*	*	*	*	*	*
WHITE......................	11	11	11	*	*	*	*	*	*	*	*	*	*
BLACK......................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	7	7	7	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS													
TOTAL......................	127	115	111	4	6	6	*	*	3	*	*	3	*
WHITE......................	113	106	102	4	4	4	*	*	*	*	*	3	*
BLACK......................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	4	4	4	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	8	3	3	*	2	2	*	*	3	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS													
TOTAL......................	160	145	144	1	5	5	*	4	*	2	*	2	2
WHITE......................	118	105	104	1	5	5	*	4	*	2	*	*	2
BLACK......................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	3	3	3	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	37	35	35	*	*	*	*	*	*	*	*	2	*
NO REPORT..............	2	2	2	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS													
TOTAL......................	15,221	10,154	9,436	718	1,088	962	126	2,002	456	760	661	33	67
WHITE......................	13,285	8,796	8,180	616	995	878	117	1,713	414	683	614	20	50
BLACK......................	330	268	246	22	14	8	6	24	7	4	5	7	1
AM. INDIAN/ALSKN NATIVE	109	66	66	*	16	16	*	16	*	6	5	*	*
ASIAN/PACIFIC ISLANDER.	1,388	939	864	75	58	55	3	249	33	67	20	6	16
NO REPORT..............	109	85	80	5	5	5	*	*	2	*	17	*	*
BIOLOGICAL SCIENTISTS													
TOTAL......................	10,646	6,603	6,037	566	859	748	111	1,570	399	565	565	23	62
WHITE......................	9,251	5,692	5,185	507	777	675	102	1,349	369	511	522	16	45
BLACK......................	248	198	181	17	12	6	6	16	7	2	5	7	1
AM. INDIAN/ALSKN NATIVE	95	59	59	*	16	16	*	10	*	5	5	*	*
ASIAN/PACIFIC ISLANDER.	944	598	561	37	49	46	3	195	23	47	16	*	16
NO REPORT..............	73	56	51	5	5	5	*	*	*	*	17	*	*
AGRICULTURAL SCIENTISTS													
TOTAL......................	530	383	333	50	26	22	4	27	7	48	35	2	2
WHITE......................	419	297	277	20	26	22	4	24	3	33	32	2	2
BLACK......................	3	3	3	*	*	*	*	*	*	*	*	*	*
AM. INDIAN/ALSKN NATIVE	2	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	104	81	51	30	*	*	*	3	2	15	3	*	*
NO REPORT..............	2	*	*	*	*	*	*	*	2	*	*	*	*
MEDICAL SCIENTISTS													
TOTAL......................	4,065	3,168	3,066	102	203	192	11	405	50	147	61	8	3
WHITE......................	3,585	2,807	2,718	89	192	181	11	340	42	139	60	2	3
BLACK......................	79	67	62	5	2	2	*	8	*	2	*	*	*
AM. INDIAN/ALSKN NATIVE	12	5	5	*	*	*	*	6	*	1	*	*	*
ASIAN/PACIFIC ISLANDER.	360	260	252	8	9	9	*	51	8	5	1	6	*
NO REPORT..............	29	29	29	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-21. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND EMPLOYMENT STATUS: 1981
CONTINUED

		EMPLOYED FULL-TIME			EMPLOYED PART-TIME					UNEMP/			
FIELD AND RACE	TOTAL	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	POST- DOC- TORAL	UNEMP/ SEEKING EMP.	NOT SEEKING EMP.	RE- TIRED	OTHER	NO REPORT
PSYCHOLOGISTS													
TOTAL........................	12,817	9,649	8,620	1,029	2,031	1,880	151	180	144	275	439	48	51
WHITE......................	11,854	8,903	7,980	923	1,941	1,801	14[illegible]	139	118	270	399	35	49
BLACK......................	390	338	280	58	22	15	[illegible]	8	6	2	10	2	2
AM. INDIAN/ALSKN NATIVE	126	89	83	6	9	9	*	28	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	254	184	158	26	42	42	*	5	20	3	*	*	*
NO REPORT................	193	135	119	16	17	13	4	*	*	*	30	11	*
SOCIAL SCIENTISTS													
TOTAL........................	9,489	7,474	6,078	1,396	752	578	174	204	265	368	327	18	81
WHITE......................	8,697	6,821	5,538	1,283	715	569	146	190	232	365	296	18	60
BLACK......................	300	274	216	58	3	1	2	8	2	3	6	*	4
AM. INDIAN/ALSKN NATIVE	35	35	29	6	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	323	252	215	37	14	11	3	6	29	*	5	*	17
NO REPORT................	134	92	80	12	20	17	3	*	2	*	20	*	*
ECONOMISTS													
TOTAL........................	1,263	1,017	862	155	111	78	33	3	*	48	69	*	15
WHITE......................	1,175	931	776	155	111	78	33	3	*	48	67	*	15
BLACK......................	12	10	10	*	*	*	*	*	*	*	2	*	*
AM. INDIAN/ALSKN NATIVE	4	4	4	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	58	58	58	*	*	*	*	*	*	*	*	*	*
NO REPORT................	14	14	14	*	*	*	*	*	*	*	*	*	*
SOCIOLOGISTS/ANTHRO.													
TOTAL........................	3,270	2,608	2,213	395	258	207	51	68	105	102	104	4	21
WHITE......................	2,980	2,373	2,014	359	236	187	49	58	92	102	96	4	19
BLACK......................	101	94	78	16	2	*	2	5	*	*	*	*	*
AM. INDIAN/ALSKN NA	16	16	14	2	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	98	70	62	8	10	10	*	5	11	*	*	*	2
NO REPORT................	75	55	45	10	10	10	*	*	2	*	8	*	*
OTHER SOCIAL SCIENTISTS													
TOTAL........................	4,956	3,849	3,003	846	383	293	90	133	160	218	154	14	45
WHITE......................	4,542	3,517	2,748	769	368	284	84	129	140	215	133	14	26
BLACK......................	187	170	128	42	1	1	*	3	2	3	4	*	4
AM. INDIAN/ALSKN NATIVE	15	15	11	4	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER.	167	124	95	29	4	1	3	1	18	*	5	*	15
NO REPORT................	45	23	21	2	10	7	3	*	*	*	12	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-22. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND TYPE OF EMPLOYER: 1981

FIELD	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
TOTAL....................	45,747	7,220	25,789	23,695	1,044	1,050	2,213	2,118	1,996	97	863	487	68	4,805	91
PHYSICAL SCIENTISTS........	4,354	1,113	2,062	1,827	169	66	74	190	233	7	72	14	•	584	5
CHEMISTS..................	3,658	981	1,701	1,489	152	60	70	149	167	5	68	14	•	498	5
PHYSICISTS/ASTRONOMERS...	696	132	361	338	17	6	4	41	66	2	4	•	•	86	•
MATHEMATICAL SCIENTISTS...	1,463	134	1,078	990	56	32	•	45	54	•	2	•	•	148	2
MATHEMATICIANS............	1,166	82	899	813	54	32	•	34	22	•	2	•	•	127	•
STATISTICIANS.............	297	52	179	177	2	•	•	11	32	•	•	•	•	21	2
COMPUTER SPECIALISTS......	714	417	252	238	7	7	•	4	12	•	7	9	•	13	•
ENVIRONMENTAL SCIENTISTS..	906	236	382	373	9	•	•	49	147	1	30	7	9	43	2
EARTH SCIENTISTS..........	615	211	215	206	9	•	•	23	99	•	21	7	•	37	2
OCEANOGRAPHERS............	206	9	120	120	•	•	•	20	41	•	4	•	9	3	•
ATMOSPHERIC SCIENTISTS...	85	16	47	47	•	•	•	6	7	1	5	•	•	3	•
ENGINEERS..................	783	422	223	221	2	•	11	46	67	2	4	2	2	24	•
AERO/ASTRO ENGINEERS.....	40	12	9	9	•	•	•	7	10	•	•	•	•	2	•
CHEMICAL ENGINEERS........	59	33	19	19	•	•	•	1	1	•	•	•	•	5	•
CIVIL ENGINEERS...........	95	39	37	37	•	•	7	•	10	•	2	•	•	•	•
ELEC./ELECTRON. ENGINEERS	139	91	37	37	•	•	•	7	4	•	•	•	•	•	•
MATERIALS SCI. ENGINEERS.	105	66	23	23	•	•	•	2	9	•	•	•	•	5	•
MECHANICAL ENGINEERS.....	40	11	20	20	•	•	•	7	•	•	•	2	•	•	•
NUCLEAR ENGINEERS........	18	8	7	7	•	•	•	2	1	•	•	•	•	•	•
SYSTEMS DESIGN ENGINEERS.	127	66	28	28	•	•	•	16	9	•	2	•	•	6	•
OTHER ENGINEERS...........	160	96	43	41	2	•	4	4	3	2	•	•	2	6	•
LIFE SCIENTISTS............	15,221	1,301	9,521	9,163	287	71	476	691	797	85	214	101	20	1,977	38
BIOLOGICAL SCIENTISTS....	10,646	743	6,842	6,526	245	71	190	537	523	22	111	28	•	1,614	36
AGRICULTURAL SCIENTISTS..	530	105	265	263	2	•	•	7	53	•	6	•	•	94	•
MEDICAL SCIENTISTS.......	4,045	453	2,414	2,374	40	•	286	147	221	63	97	73	20	269	2
PSYCHOLOGISTS..............	12,817	2,996	5,998	4,998	255	745	1,558	526	187	2	318	261	3	957	9
SOCIAL SCIENTISTS..........	9,489	601	6,273	5,885	259	129	94	567	519	•	216	93	32	1,059	35
ECONOMISTS................	1,263	176	668	661	2	5	•	108	136	•	13	•	24	132	6
SOCIOLOGISTS/ANTHRO......	3,270	84	2,459	2,354	75	30	69	158	82	•	57	•	•	336	25
OTHER SOCIAL SCIENTISTS..	4,956	341	3,146	2,870	182	94	25	301	301	•	146	93	8	591	4

• NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-23. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND PRIMARY WORK ACTIVITY: 1981

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN					SALES/			
			BASIC	APPL'D										
FIELD	TOTAL	TOTAL	RE-SEARCH	RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
TOTAL......................	45,747	12,290	7,991	3,515	784	5,001	1,522	3,479	13,919	1,072	5,817	2,253	4,805	590
PHYSICAL SCIENTISTS........	4,354	1,764	1,070	535	159	465	233	232	1,149	16	88	231	584	57
CHEMISTS..................	3,658	1,414	844	439	131	408	201	207	1,006	9	76	198	498	49
PHYSICISTS/ASTRONOMERS...	696	350	226	96	28	57	32	25	143	7	12	33	86	8
MATHEMATICAL SCIENTISTS...	[illegible]	227	108	101	18	69	21	48	905	58	14	29	148	13
MATHEMATICIANS............	1,166	158	82	58	18	55	11	44	753	31	7	24	127	11
STATISTICIANS.............	297	69	26	43	*	14	10	4	152	27	7	5	21	2
COMPUTER SPECIALISTS.......	714	372	35	92	245	52	30	22	131	42	30	70	13	4
ENVIRONMENTAL SCIENTISTS..	906	373	266	101	6	146	89	57	171	55	16	94	43	8
EARTH SCIENTISTS..........	615	177	99	72	6	100	46	54	146	48	15	87	37	5
OCEANOGRAPHERS............	206	136	129	7	*	35	32	3	18	7	1	3	3	3
ATMOSPHERIC SCIENTISTS...	85	60	38	22	*	11	11	*	7	*	*	4	3	*
ENGINEERS..................	783	379	46	193	140	103	80	23	115	62	16	83	24	1
AERO/ASTRO ENGINEERS.....	40	23	1	16	6	7	6	1	4	*	2	2	2	*
CHEMICAL ENGINEERS.......	59	36	9	20	7	7	7	*	6	5	*	*	5	*
CIVIL ENGINEERS..........	95	11	*	9	2	2	2	*	28	35	*	19	*	*
ELEC./ELECTRON. ENGINEERS	139	68	8	30	30	12	8	4	25	3	5	26	*	*
MATERIALS SCI. ENGINEERS.	105	69	16	42	11	18	14	4	10	3	*	*	5	*
MECHANICAL ENGINEERS.....	40	9	*	4	5	8	8	*	16	*	*	7	*	*
NUCLEAR ENGINEERS........	18	9	*	9	*	4	4	*	*	3	*	2	*	*
SYSTEMS DESIGN ENGINEERS.	127	82	*	24	58	21	17	4	12	6	*	*	6	*
OTHER ENGINEERS..........	160	72	12	39	21	24	14	10	14	7	9	27	6	1
LIFE SCIENTISTS............	15,221	6,576	5,249	1,198	129	1,347	463	884	3,618	170	652	720	1,977	161
BIOLOGICAL SCIENTISTS....	10,646	4,940	4,329	547	64	630	213	417	2,713	104	188	343	1,614	114
AGRICULTURAL SCIENTISTS..	530	198	69	110	19	35	26	9	92	10	3	91	94	7
MEDICAL SCIENTISTS.......	4,045	1,438	851	541	46	682	224	458	813	56	461	286	269	40
PSYCHOLOGISTS..............	12,817	1,202	579	562	61	1,500	240	1,260	3,265	473	4,732	522	957	166
SOCIAL SCIENTISTS..........	9,489	1,397	638	733	26	1,319	366	953	4,565	196	269	504	1,059	180
ECONOMISTS................	1,263	291	73	208	10	143	48	95	498	62	8	74	132	55
SOCIOLOGISTS/ANTHRO......	3,270	599	267	326	6	244	55	189	1,812	14	103	106	336	56
OTHER SOCIAL SCIENTISTS..	4,956	507	298	199	10	932	263	669	2,255	120	158	324	591	69

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE 8-24. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE: 1981

FIELD	TOTAL	YEARS OF PROFESSIONAL EXPERIENCE										
		1 OR LESS YEARS	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40 OR MORE YEARS	NO REPORT
TOTAL....................	45,747	1,374	6,460	12,264	7,648	3,947	2,527	1,885	1,354	854	850	6,584
PHYSICAL SCIENTISTS.......	4,354	162	651	1,019	614	331	286	208	182	87	90	724
CHEMISTS..................	3,658	145	559	819	496	271	244	176	169	79	81	619
PHYSICISTS/ASTRONOMERS...	696	17	92	200	118	60	42	32	13	8	9	105
MATHEMATICAL SCIENTISTS...	1,463	40	165	381	214	155	69	81	46	38	46	228
MATHEMATICIANS............	1,166	15	121	296	166	124	62	76	42	32	40	192
STATISTICIANS.............	297	25	44	85	48	31	7	5	4	6	6	36
COMPUTER SPECIALISTS......	714	9	128	253	124	44	24	4	3	*	2	123
ENVIRONMENTAL SCIENTISTS..	906	30	132	306	129	67	78	25	8	10	19	104
EARTH SCIENTISTS..........	615	14	94	167	100	52	64	19	6	8	13	78
OCEANOGRAPHERS............	206	8	14	99	23	10	13	6	1	*	6	26
ATMOSPHERIC SCIENTISTS...	85	8	24	38	6	5	1	*	1	2	*	*
ENGINEERS.................	783	48	132	238	138	47	39	19	10	5	2	105
AERO/ASTRO ENGINEERS.....	40	*	9	10	3	6	2	3	*	*	*	7
CHEMICAL ENGINEERS........	59	6	20	13	12	*	*	2	*	*	*	6
CIVIL ENGINEERS...........	95	23	15	35	1	4	7	*	*	*	*	10
ELEC./ELECTRON. ENGINEERS	139	6	21	31	46	14	7	2	4	*	*	8
MATERIALS SCI. ENGINEERS.	105	5	23	29	19	7	1	6	*	*	*	15
MECHANICAL ENGINEERS.....	40	*	*	9	12	2	3	2	2	1	*	9
NUCLEAR ENGINEERS.........	18	*	7	7	3	*	*	*	*	*	*	1
SYSTEMS DESIGN ENGINEERS.	127	6	12	52	14	5	9	2	2	4	*	21
OTHER ENGINEERS...........	160	2	25	52	28	9	10	2	2	*	2	28
LIFE SCIENTISTS............	15,221	593	2,314	3,717	2,314	1,285	880	703	519	339	285	2,272
BIOLOGICAL SCIENTISTS....	10,646	424	1,636	2,696	1,656	859	584	426	336	205	203	1,621
AGRICULTURAL SCIENTISTS..	530	19	124	135	103	43	14	12	14	10	6	50
MEDICAL SCIENTISTS.......	4,045	150	554	886	555	383	282	265	169	124	76	601
PSYCHOLOGISTS.............	12,817	253	1,739	3,862	2,170	1,058	689	524	359	249	197	1,717
SOCIAL SCIENTISTS..........	9,489	239	1,199	2,490	1,945	960	462	321	227	126	209	1,311
ECONOMISTS................	1,263	18	146	262	310	134	92	24	41	23	45	168
SOCIOLOGISTS/ANTHRO......	3,270	66	389	930	659	367	137	129	62	46	74	411
OTHER SOCIAL SCIENTISTS..	4,956	155	664	1,298	976	459	233	168	124	57	90	732

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-25. MEDIAN ANNUAL SALARIES OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND RACE: 1981

		RACE				
FIELD	TOTAL	WHITE	BLACK	AMERICAN INDIAN	ASIAN	NO REPORT
TOTAL	27,000	26,800	28,300	30,000	28,000	31,000
PHYSICAL SCIENTISTS	29,400	29,900	31,400	**	28,200	**
CHEMISTS	29,100	29,600	**	**	28,100	**
PHYSICISTS/ASTRONOMERS	31,200	31,400	**	**	**	**
MATHEMATICAL SCIENTISTS	26,800	26,500	**	**	29,700	**
MATHEMATICIANS	26,700	26,300	**	**	29,600	**
STATISTICIANS	27,000	27,000	**	**	**	**
COMPUTER SPECIALISTS	28,700	28,600	**	**	28,700	**
ENVIRONMENTAL SCIENTISTS	29,200	29,500	**	**	**	**
EARTH SCIENTISTS	30,000	30,300	**	**	**	**
OCEANOGRAPHERS	28,700	28,300	**	**	**	**
ATMOSPHERIC SCIENTISTS	28,000	28,100	**	**	**	**
ENGINEERS	32,000	31,600	**	**	32,500	**
AERO/ASTRO ENGINEERS	**	**	**	**	**	**
CHEMICAL ENGINEERS	32,600	**	**	**	**	**
CIVIL ENGINEERS	28,600	28,100	**	**	**	**
ELEC./ELECTRON. ENGINEERS	31,800	31,700	**	**	**	**
MATERIALS SCI. ENGINEERS	32,600	31,500	**	**	**	**
MECHANICAL ENGINEERS	**	**	**	**	**	**
NUCLEAR ENGINEERS	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS	34,900	35,000	**	**	**	**
OTHER ENGINEERS	31,700	31,300	**	**	**	**
LIFE SCIENTISTS	27,100	26,800	29,500	**	27,900	**
BIOLOGICAL SCIENTISTS	26,300	26,000	29,000	**	27,400	**
AGRICULTURAL SCIENTISTS	26,200	26,600	**	**	**	**
MEDICAL SCIENTISTS	29,500	28,800	29,700	**	30,700	**
PSYCHOLOGISTS	26,200	25,900	27,700	**	25,800	31,900
SOCIAL SCIENTISTS	25,900	25,900	26,700	**	25,300	**
ECONOMISTS	31,400	31,900	**	**	**	**
SOCIOLOGISTS/ANTHRO	25,100	25,000	26,600	**	**	**
OTHER SOCIAL SCIENTISTS	25,800	25,700	26,500	**	25,500	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 8-26. MEDIAN ANNUAL SALARIES OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND TYPE OF EMPLOYER: 1981

FIELD	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
TOTAL....................	27,000	31,600	25,700	25,600	27,100	26,400	26,700	28,500	33,500	**	24,700	25,600	**	**	**
PHYSICAL SCIENTISTS........	29,400	32,000	26,100	26,000	26,700	**	**	31,100	36,600	**	18,600	**	**	**	**
CHEMISTS..................	29,100	31,900	25,400	24,800	29,000	**	**	30,800	36,800	**	**	**	**	**	**
PHYSICISTS/ASTRONOMERS...	31,200	34,000	29,200	29,800	**	**	**	32,300	35,600	**	**	**	**	**	**
MATHEMATICAL SCIENTISTS...	26,800	33,100	25,800	25,800	25,800	**	**	**	**	**	**	**	**	**	**
MATHEMATICIANS............	26,700	34,500	26,000	26,000	25,700	**	**	**	**	**	**	**	**	**	**
STATISTICIANS.............	27,000	**	24,900	24,800	**	**	**	**	**	**	**	**	**	**	**
COMPUTER SPECIALISTS.......	28,700	28,900	28,000	28,300	**	**	**	**	**	**	**	**	**	**	**
ENVIRONMENTAL SCIENTISTS..	29,200	32,200	26,400	26,300	**	**	**	**	32,700	**	**	**	**	**	**
EARTH SCIENTISTS..........	30,000	32,300	26,100	26,000	**	**	**	**	34,200	**	**	**	**	**	**
OCEANOGRAPHERS............	28,700	**	27,200	27,200	**	**	**	**	**	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS...	28,000	**	**	**	**	**	**	**	**	**	**	**	**	**	**
ENGINEERS..................	32,000	32,600	29,600	29,700	**	**	**	34,400	32,200	**	**	**	**	**	**
AERO/ASTRO ENGINEERS......	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
CHEMICAL ENGINEERS........	32,600	**	**	**	**	**	**	**	**	**	**	**	**	**	**
CIVIL ENGINEERS...........	28,600	**	**	**	**	**	**	**	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	31,800	31,500	**	**	**	**	**	**	**	**	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	32,600	33,500	**	**	**	**	**	**	**	**	**	**	**	**	**
MECHANICAL ENGINEERS......	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NUCLEAR ENGINEERS.........	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	34,900	35,200	**	**	**	**	**	**	**	**	**	**	**	**	**
OTHER ENGINEERS...........	31,700	32,400	**	**	**	**	**	**	**	**	**	**	**	**	**
LIFE SCIENTISTS............	27,100	30,500	26,200	26,200	27,200	**	26,500	27,800	33,200	**	25,900	**	**	**	**
BIOLOGICAL SCIENTISTS.....	26,300	29,300	25,600	25,600	27,400	**	24,900	30,000	32,700	**	**	**	**	**	**
AGRICULTURAL SCIENTISTS..	26,200	27,200	23,800	23,900	**	**	**	**	**	**	**	**	**	**	**
MEDICAL SCIENTISTS........	29,500	35,400	28,100	28,200	**	**	26,700	27,300	35,900	**	26,900	**	**	**	**
PSYCHOLOGISTS..............	26,200	32,600	25,200	25,000	30,100	27,400	27,000	28,600	34,800	**	24,800	25,500	**	**	**
SOCIAL SCIENTISTS..........	25,900	30,900	25,300	25,300	26,600	**	**	28,000	34,700	**	23,300	**	**	**	**
ECONOMISTS................	31,400	37,100	28,100	28,200	**	**	**	**	44,700	**	**	**	**	**	**
SOCIOLOGISTS/ANTHRO.......	25,100	**	24,900	24,900	**	**	**	**	**	**	**	**	**	**	**
OTHER SOCIAL SCIENTISTS..	25,800	25,600	25,400	25,400	29,100	**	**	25,600	36,900	**	**	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-27. MEDIAN ANNUAL SALARIES OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND PRIMARY WORK ACTIVITY: 1981

FIELD	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH- ING	CON- SULT- ING	SALES/ PROF. SER- VICES	OTHER	NOT EM- PLOYED	NO REPORT
		TOTAL	BASIC RE- SEARCH	APPL'D RE- SEARCH	DEVEL- OPMENT	TOTAL	OF R&D	OF OTHER						
TOTAL	27,000	28,000	26,400	29,800	29,800	32,400	36,000	30,700	25,300	28,900	26,600	26,300	**	26,600
PHYSICAL SCIENTISTS	29,400	30,100	28,500	31,600	29,600	35,100	36,700	31,900	26,000	**	33,000	28,900	**	**
CHEMISTS	29,100	29,900	27,900	31,500	29,200	34,700	36,400	30,900	25,800	**	33,200	29,300	**	**
PHYSICISTS/ASTRONOMERS	31,200	31,600	30,300	34,000	**	39,300	**	**	28,200	**	**	**	**	**
MATHEMATICAL SCIENTISTS	26,800	30,000	28,000	33,300	**	32,000	**	30,200	25,200	**	**	**	**	**
MATHEMATICIANS	26,700	30,100	28,200	**	**	30,700	**	29,600	25,400	**	**	**	**	**
STATISTICIANS	27,000	29,600	**	**	**	**	**	**	24,400	**	**	**	**	**
COMPUTER SPECIALISTS	28,700	28,900	**	35,600	28,200	39,300	**	**	28,200	**	**	**	**	**
ENVIRONMENTAL SCIENTISTS	29,200	29,800	29,100	31,200	**	39,600	39,700	**	25,400	**	**	23,500	**	**
EARTH SCIENTISTS	30,000	32,200	31,200	32,800	**	41,100	**	**	25,300	**	**	23,100	**	**
OCEANOGRAPHERS	28,700	27,700	29,100	**	**	**	**	**	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS	28,000	**	**	**	**	**	**	**	**	**	**	**	**	**
ENGINEERS	32,000	32,200	**	32,200	33,300	40,000	39,100	**	28,900	**	**	**	**	**
AERO/ASTRO ENGINEERS	**	**	**	**	**	**	**	**	**	**	**	**	**	**
CHEMICAL ENGINEERS	32,600	**	**	**	**	**	**	**	**	**	**	**	**	**
CIVIL ENGINEERS	28,600	**	**	**	**	**	**	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	31,800	34,600	**	**	**	**	**	**	**	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	32,600	31,800	**	31,500	**	**	**	**	**	**	**	**	**	**
MECHANICAL ENGINEERS	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NUCLEAR ENGINEERS	**	**	**	**	**	**	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	34,900	33,300	**	**	33,500	**	**	**	**	**	**	**	**	**
OTHER ENGINEERS	31,700	31,600	**	**	**	**	**	**	**	**	**	**	**	**
LIFE SCIENTISTS	27,100	27,000	26,000	28,500	30,500	33,200	36,100	31,700	26,000	28,200	26,600	25,300	**	**
BIOLOGICAL SCIENTISTS	26,300	26,400	25,700	29,700	**	33,100	36,600	30,800	25,300	**	24,300	24,500	**	**
AGRICULTURAL SCIENTISTS	26,200	27,100	**	27,100	**	**	**	**	22,900	**	**	**	**	**
MEDICAL SCIENTISTS	29,500	28,200	27,400	28,600	**	33,400	35,900	32,300	28,000	**	30,000	27,600	**	**
PSYCHOLOGISTS	26,200	27,000	24,400	29,000	**	29,300	32,400	28,900	25,100	25,900	26,700	26,700	**	**
SOCIAL SCIENTISTS	25,900	27,500	25,600	28,000	**	32,300	33,500	30,500	24,600	35,500	20,500	25,700	**	25,800
ECONOMISTS	31,400	32,000	**	28,900	**	42,800	**	42,500	25,600	**	**	**	**	**
SOCIOLOGISTS/ANTHRO	25,100	26,200	21,800	27,000	**	30,800	**	29,500	24,600	**	**	**	**	**
OTHER SOCIAL SCIENYISTS	25,800	25,800	25,900	25,500	**	32,000	33,300	29,800	24,000	**	28,100	25,100	**	**

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NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-28. MEDIAN ANNUAL SALARIES OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE: 1981

FIELD	TOTAL	YEARS OF PROFESSIONAL EXPERIENCE 1 OR LESS YEARS	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40 OR MORE YEARS	NO REPORT
TOTAL....................	27,000	20,100	22,400	25,000	27,900	30,200	32,900	33,700	34,100	36,300	32,700	29,500
PHYSICAL SCIENTISTS.......	29,400	27,500	28,500	27,400	30,300	30,800	30,500	34,600	33,500	**	**	28,200
CHEMISTS..................	29,100	**	28,700	26,500	30,000	30,700	30,100	33,500	33,400	**	**	27,600
PHYSICISTS/ASTRONOMERS...	31,200	**	25,000	28,900	32,800	31,300	**	**	**	**	**	30,600
MATHEMATICAL SCIENTISTS...	26,800	**	20,800	25,000	26,600	29,100	31,100	30,700	36,200	**	**	28,200
MATHEMATICIANS...........	26,700	**	20,100	24,700	27,200	28,400	30,700	30,600	**	**	**	29,500
STATISTICIANS............	27,000	**	**	26,100	**	**	**	**	**	**	**	**
COMPUTER SPECIALISTS......	28,700	**	28,400	25,800	29,100	**	**	**	**	**	**	31,000
ENVIRONMENTAL SCIENTISTS..	29,200	**	26,600	25,900	29,700	32,000	35,500	**	**	**	**	30,600
EARTH SCIENTISTS..........	30,000	**	28,100	25,600	33,000	**	33,200	**	**	**	**	35,100
OCEANOGRAPHERS...........	28,700	**	**	**	**	**	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS...	28,000	**	**	**	**	**	**	**	**	**	**	**
ENGINEERS.................	32,000	**	29,700	32,700	28,900	35,600	**	**	**	**	**	36,600
AERO/ASTRO ENGINEERS.....	**	**	**	**	**	**	**	**	**	**	**	**
CHEMICAL ENGINEERS.......	32,600	**	**	**	**	**	**	**	**	**	**	**
CIVIL ENGINEERS..........	28,600	**	**	**	**	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	31,800	**	**	**	**	**	**	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	32,600	**	**	**	**	**	**	**	**	**	**	**
MECHANICAL ENGINEERS.....	**	**	**	**	**	**	**	**	**	**	**	**
NUCLEAR ENGINEERS........	**	**	**	**	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	34,900	**	**	33,700	**	**	**	**	**	**	**	**
OTHER ENGINEERS..........	31,700	**	**	32,600	**	**	**	**	**	**	**	**
LIFE SCIENTISTS...........	27,100	20,000	21,500	24,700	27,800	30,000	30,900	34,400	34,600	35,800	30,000	27,900
BIOLOGICAL SCIENTISTS....	26,300	**	20,900	24,000	27,400	29,300	30,500	35,600	34,900	**	**	26,700
AGRICULTURAL SCIENTISTS..	26,200	**	24,800	22,900	27,200	**	**	**	**	**	**	**
MEDICAL SCIENTISTS.......	29,500	**	22,500	26,200	30,200	30,600	32,700	33,400	33,100	39,500	**	30,700
PSYCHOLOGISTS.............	26,200	**	21,800	24,800	28,200	30,600	34,400	33,200	33,900	36,500	**	30,800
SOCIAL SCIENTISTS.........	25,900	**	21,400	24,100	26,600	29,600	34,300	33,000	35,200	**	**	28,900
ECONOMISTS................	31,400	**	**	28,000	33,300	32,800	36,500	**	**	**	**	31,900
SOCIOLOGISTS/ANTHRO......	25,100	**	20,300	23,800	26,000	28,800	34,700	34,300	**	**	**	27,100
OTHER SOCIAL SCIENTISTS..	25,800	**	22,000	23,800	26,600	29,700	33,100	32,800	**	**	**	29,300

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NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STAT' GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
ALL FIELDS															
TOTAL	363,866	99,020	186,809	179,010	5,035	2,764	9,862	12,581	25,087	2,052	4,454	2,068	992	20,328	613
TOTAL SUPPORTED	126,704	16,832	67,678	66,575	523	580	4,321	8,061	25,087	2,052	1,734	735	164	*	40
NASA	7,555	2,005	3,228	3,228	*	*	7	206	2,055	5	*	*	49	*	*
NSF	17,353	471	15,586	15,376	210	*	14	719	470	6	15	7	40	*	25
EPA	4,738	1,363	1,653	1,646	7	*	*	344	970	35	229	104	40	*	*
DOE	17,961	4,630	9,186	9,169	17	*	67	2,499	1,505	20	57	8	*	*	9
NRC	1,469	363	414	414	*	*	*	501	185	*	6	*	*	*	*
AID	1,427	112	707	707	*	*	*	388	205	8	7	*	*	*	*
DHHS, TOTAL	36,042	1,252	25,283	25,230	27	26	2,169	2,459	3,404	433	628	323	87	*	4
NIH	27,633	634	21,865	21,850	15	*	1,096	1,826	1,798	179	184	67	*	*	4
ALCOHOL/DRUG ABUSE&MHA	5,341	235	2,818	2,807	7	4	1,114	456	337	13	170	198	*	*	*
OTHER DHHS	4,327	425	1,627	1,400	5	22	106	275	1,313	241	326	107	87	*	*
ED, TOTAL	3,180	337	2,507	2,094	66	347	36	116	96	*	88	*	*	*	*
DE	905	110	680	632	3	45	10	74	6	*	25	*	*	*	*
OTHER ED	2,318	227	1,863	1,498	63	302	26	69	90	*	63	*	*	*	*
DOD	21,764	7,579	5,534	5,509	25	*	185	1,655	5,267	1,508	4	32	*	*	*
COMMERCE	4,408	305	1,690	1,688	2	*	7	192	1,826	80	173	86	49	*	*
USDA	12,891	115	8,189	8,179	10	*	7	138	4,339	*	94	7	*	*	2
DOT	2,050	701	690	688	2	*	*	173	321	20	51	54	40	*	*
JUSTICE	830	191	337	327	10	*	36	98	126	*	29	13	*	*	*
HUD	647	183	209	209	*	*	5	82	90	*	65	13	*	*	*
INTERIOR	5,718	443	2,366	2,337	29	*	7	184	2,359	9	271	39	40	*	*
OTHER	10,201	889	3,136	2,967	105	64	1,921	444	3,635	29	160	80	107	*	*
SOURCE UNKNOWN	1,877	279	930	779	45	106	152	117	273	*	53	38	35	*	*
SOURCE NOT REPORTED	1,223	265	787	704	24	59	66	80	*	*	21	4	*	*	*
NOT SUPPORTED	160,734	63,687	86,892	82,130	3,358	1,404	3,520	3,253	*	*	1,927	888	543	*	24
SUPPORT STATUS UNKNOWN	6,373	854	4,145	3,356	449	340	632	153	*	*	248	242	99	*	*
NO REPORT	49,727	17,647	28,094	26,949	705	440	1,389	1,114	*	*	545	203	186	*	549
NOT EMPLOYED	20,328	*	*	*	*	*	*	*	*	*	*	*	*	20,328	*
PHYSICAL SCIENTISTS															
TOTAL	67,693	27,401	28,333	26,897	1,162	274	518	2,071	4,343	136	358	100	*	4,504	29
TOTAL SUPPORTED	22,926	3,702	12,940	12,791	117	32	190	1,464	4,343	136	90	61	*	*	*
NASA	2,560	464	1,314	1,314	*	*	*	24	758	*	*	*	*	*	*
NSF	5,163	104	4,805	4,761	44	*	*	181	73	*	*	*	*	*	*
EPA	834	169	250	250	*	*	*	88	252	*	36	59	*	*	*
DOE	7,140	1,325	4,514	4,497	17	*	*	726	561	14	*	*	*	*	*
NRC	218	68	37	37	*	*	*	51	62	*	*	*	*	*	*
AID	32	*	*	*	*	*	*	29	*	3	*	*	*	*	*
DHHS, TOTAL	3,660	161	2,830	2,830	*	*	66	198	372	31	*	2	*	*	*
NIH	3,162	104	2,713	2,713	*	*	66	185	92	2	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	98	15	69	69	*	*	*	2	12	*	*	*	*	*	*
OTHER DHHS	445	42	85	85	*	*	*	13	274	29	*	2	*	*	*
ED, TOTAL	111	*	110	105	*	5	*	*	*	*	1	*	*	*	*
DE	6	*	6	6	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	105	*	104	99	*	5	*	*	*	*	1	*	*	*	*
DOD	5,511	1,937	1,535	1,535	*	*	*	391	1,543	102	3	*	*	*	*
COMMERCE	696	11	156	156	*	*	*	36	488	3	2	*	*	*	*
USDA	461	*	163	163	*	*	7	6	285	*	*	*	*	*	*
DOT	179	22	65	63	2	*	*	1	59	*	32	*	*	*	*
JUSTICE	4	*	*	*	*	*	*	2	2	*	*	*	*	*	*
HUD	36	*	36	36	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	137	*	70	68	2	*	*	2	55	3	7	*	*	*	*
OTHER	833	98	339	309	30	*	122	52	218	*	4	*	*	*	*
SOURCE UNKNOWN	299	36	117	90	*	27	8	31	107	*	*	*	*	*	*
SOURCE NOT REPORTED	246	64	117	93	24	*	*	59	*	*	6	*	*	*	*
NOT SUPPORTED	31,158	19,155	11,198	10,307	674	217	236	437	*	*	121	11	*	*	*
SUPPORT STATUS UNKNOWN	768	224	447	297	147	3	8	59	*	*	2	28	*	*	*
NO REPORT	8,337	4,320	3,748	3,502	224	22	84	111	*	*	45	*	*	*	29
NOT EMPLOYED	4,504	*	*	*	*	*	*	*	*	*	*	*	*	4,504	*
CHEMISTS															
TOTAL	45,376	22,250	15,772	14,621	923	228	405	1,033	2,131	65	203	100	*	3,405	12
TOTAL SUPPORTED	10,511	1,416	5,954	5,853	93	8	190	604	2,131	65	90	61	*	*	*
NASA	644	235	186	186	*	*	*	4	219	*	*	*	*	*	*
NSF	2,364	72	2,275	2,231	44	*	*	15	2	*	*	*	*	*	*
EPA	736	135	183	183	*	*	*	85	238	*	36	59	*	*	*
DOE	2,405	512	1,401	1,384	17	*	*	275	217	*	*	*	*	*	*
NRC	62	2	*	*	*	*	*	44	16	*	*	*	*	*	*
AID	32	*	*	*	*	*	*	29	*	3	*	*	*	*	*
DHHS, TOTAL	3,551	161	2,739	2,739	*	*	66	198	354	31	*	2	*	*	*
NIH	3,108	104	2,659	2,659	*	*	66	185	92	2	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	81	15	52	52	*	*	*	2	12	*	*	*	*	*	*
OTHER DHHS	407	42	65	65	*	*	*	13	256	29	*	2	*	*	*
ED, TOTAL	82	*	81	76	*	5	*	*	*	*	1	*	*	*	*
DE	2	*	2	2	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	80	*	79	74	*	5	*	*	*	*	1	*	*	*	*
DOD	2,054	507	781	781	*	*	*	157	575	31	3	*	*	*	*
COMMERCE	259	2	79	79	*	*	*	33	140	3	2	*	*	*	*
USDA	461	*	163	163	*	*	7	6	285	*	*	*	*	*	*
DOT	118	*	38	36	2	*	*	*	48	*	32	*	*	*	*
JUSTICE	4	*	*	*	*	*	*	2	2	*	*	*	*	*	*
HUD	36	*	36	36	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	74	*	23	21	2	*	*	2	39	3	7	*	*	*	*
OTHER	395	27	105	75	30	*	122	6	131	*	4	*	*	*	*
SOURCE UNKNOWN	120	30	39	36	*	3	8	7	36	*	*	*	*	*	*
SOURCE NOT REPORTED	104	62	36	36	*	*	*	*	*	*	6	*	*	*	*
NOT SUPPORTED	25,013	17,086	7,400	6,653	549	198	144	303	*	*	69	11	*	*	*
SUPPORT STATUS UNKNOWN	632	220	317	209	106	2	6	59	*	*	2	28	*	*	*
NO REPORT	5,815	3,528	2,101	1,906	175	20	65	67	*	*	42	*	*	*	12
NOT EMPLOYED	3,405	*	*	*	*	*	*	*	*	*	*	*	*	3,405	*

* NO CASES REPORTED

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TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
PHYSICISTS/ASTRONOMERS															
TOTAL	22,317	5,151	12,561	12,276	239	46	113	1,038	2,212	71	55	*	*	1,099	17
TOTAL SUPPORTED	12,415	2,286	6,986	6,938	24	24	*	860	2,212	71	*	*	*	*	*
NASA	1,916	229	1,128	1,128	*	*	*	20	539	*	*	*	*	*	*
NSF	2,799	32	2,530	2,530	*	*	*	166	71	*	*	*	*	*	*
EPA	98	14	67	67	*	*	*	3	14	*	*	*	*	*	*
DOE	4,735	813	3,113	3,113	*	*	*	451	344	14	*	*	*	*	*
NRC	156	66	37	37	*	*	*	7	46	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	109	*	91	91	*	*	*	*	18	*	*	*	*	*	*
NIH	54	*	54	54	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	17	*	17	17	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	38	*	20	20	*	*	*	*	18	*	*	*	*	*	*
ED, TOTAL	29	*	29	29	*	*	*	*	*	*	*	*	*	*	*
OE	4	*	4	4	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	25	*	25	25	*	*	*	*	*	*	*	*	*	*	*
DOD	3,457	1,430	754	754	*	*	*	234	968	71	*	*	*	*	*
COMMERCE	437	9	77	77	*	*	*	3	348	*	*	*	*	*	*
USDA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOT	61	22	27	27	*	*	*	1	11	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	63	*	47	47	*	*	*	*	16	*	*	*	*	*	*
OTHER	438	71	234	234	*	*	*	46	87	*	*	*	*	*	*
SOURCE UNKNOWN	179	6	78	54	*	24	*	24	71	*	*	*	*	*	*
SOURCE NOT REPORTED	142	2	81	57	24	*	*	59	*	*	*	*	*	*	*
NOT SUPPORTED	6,145	2,069	3,798	3,654	125	19	92	134	*	*	52	*	*	*	*
SUPPORT STATUS UNKNOWN	136	4	130	88	41	1	2	*	*	*	*	*	*	*	*
NO REPORT	2,522	792	1,647	1,596	49	2	19	44	*	*	3	*	*	*	17
NOT EMPLOYED	1,099	*	*	*	*	*	*	*	*	*	*	*	*	1,099	*
MATHEMATICAL SCIENTISTS															
TOTAL	16,470	1,621	12,739	12,294	302	143	*	263	852	57	2	*	14	876	46
TOTAL SUPPORTED	3,743	530	2,140	2,098	29	13	*	164	852	57	*	*	*	*	*
NASA	194	70	124	124	*	*	*	*	*	*	*	*	*	*	*
NSF	1,205	8	1,137	1,108	29	*	*	26	34	*	*	*	*	*	*
EPA	132	*	89	89	*	*	*	16	27	*	*	*	*	*	*
DOE	381	142	120	120	*	*	*	68	51	*	*	*	*	*	*
NRC	16	15	*	*	*	*	*	1	*	*	*	*	*	*	*
AID	1	*	1	1	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	271	36	154	154	*	*	*	17	64	*	*	*	*	*	*
NIH	137	5	100	100	*	*	*	17	15	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	32	*	30	30	*	*	*	2	*	*	*	*	*	*	*
OTHER DHHS	127	31	40	40	*	*	*	7	49	*	*	*	*	*	*
ED, TOTAL	82	*	78	65	*	13	*	2	2	*	*	*	*	*	*
OE	32	*	30	17	*	13	*	*	2	*	*	*	*	*	*
OTHER ED	51	*	49	49	*	*	*	2	*	*	*	*	*	*	*
DOD	1,195	303	438	438	*	*	*	78	319	57	*	*	*	*	*
COMMERCE	138	8	16	16	*	*	*	*	114	*	*	*	*	*	*
USDA	134	5	67	67	*	*	*	*	62	*	*	*	*	*	*
DOT	66	29	15	15	*	*	*	*	22	*	*	*	*	*	*
JUSTICE	33	*	16	16	*	*	*	*	17	*	*	*	*	*	*
HUD	10	8	*	*	*	*	*	*	2	*	*	*	*	*	*
INTERIOR	33	*	28	28	*	*	*	*	5	*	*	*	*	*	*
OTHER	207	50	7	7	*	*	*	21	129	*	*	*	*	*	*
SOURCE UNKNOWN	61	*	47	47	*	*	*	*	14	*	*	*	*	*	*
SOURCE NOT REPORTED	34	17	17	17	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	9,089	815	8,197	7,889	226	82	*	60	*	*	2	*	*	*	15
SUPPORT STATUS UNKNOWN	243	40	203	195	5	3	*	*	*	*	*	*	*	*	*
NO REPORT	2,519	236	2,199	2,112	42	45	*	39	*	*	*	*	14	*	31
NOT EMPLOYED	876	*	*	*	*	*	*	*	*	*	*	*	*	876	*
MATHEMATICIANS															
TOTAL	13,819	1,159	11,007	10,564	300	143	*	224	553	57	2	*	*	781	36
TOTAL SUPPORTED	2,678	342	1,601	1,559	29	13	*	125	553	57	*	*	*	*	*
NASA	138	30	108	108	*	*	*	*	*	*	*	*	*	*	*
NSF	1,112	*	1,069	1,040	29	*	*	17	26	*	*	*	*	*	*
EPA	2	*	*	*	*	*	*	2	*	*	*	*	*	*	*
DOE	204	44	79	79	*	*	*	52	29	*	*	*	*	*	*
NRC	15	15	*	*	*	*	*	*	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	112	5	79	79	*	*	*	8	20	*	*	*	*	*	*
NIH	68	5	55	55	*	*	*	8	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	44	*	24	24	*	*	*	*	20	*	*	*	*	*	*
ED, TOTAL	54	*	52	39	*	13	*	2	*	*	*	*	*	*	*
OE	16	*	16	3	*	13	*	*	*	*	*	*	*	*	*
OTHER ED	39	*	37	37	*	*	*	2	*	*	*	*	*	*	*
DOD	933	255	272	272	*	*	*	76	273	57	*	*	*	*	*
COMMERCE	83	*	16	16	*	*	*	*	67	*	*	*	*	*	*
USDA	45	*	*	*	*	*	*	*	45	*	*	*	*	*	*
DOT	52	15	15	15	*	*	*	*	22	*	*	*	*	*	*
JUSTICE	14	*	*	*	*	*	*	*	14	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	5	*	*	*	*	*	*	*	5	*	*	*	*	*	*
OTHER	58	15	5	5	*	*	*	*	38	*	*	*	*	*	*
SOURCE UNKNOWN	43	*	29	29	*	*	*	*	14	*	*	*	*	*	*
SOURCE NOT REPORTED	34	17	17	17	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	7,854	591	7,194	6,888	224	82	*	60	*	*	2	*	*	*	7
SUPPORT STATUS UNKNOWN	243	40	203	195	5	3	*	*	*	*	*	*	*	*	*
NO REPORT	2,263	186	2,009	1,922	42	45	*	39	*	*	*	*	*	*	29
NOT EMPLOYED	781	*	*	*	*	*	*	*	*	*	*	*	*	781	*

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TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
STATISTICIANS															
TOTAL	2,651	462	1,732	1,730	2	*	*	39	299	*	*	*	14	95	10
TOTAL SUPPORTED	1,065	188	539	539	*	*	*	39	299	*	*	*	*	*	*
NASA	56	40	16	16	*	*	*	*	*	*	*	*	*	*	*
NSF	93	8	68	68	*	*	*	9	8	*	*	*	*	*	*
EPA	130	*	89	89	*	*	*	14	27	*	*	*	*	*	*
DOE	177	98	41	41	*	*	*	16	22	*	*	*	*	*	*
NRC	1	*	*	*	*	*	*	1	*	*	*	*	*	*	*
AID	1	*	1	1	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	159	31	75	75	*	*	*	9	44	*	*	*	*	*	*
NIH	69	*	65	65	*	*	*	9	15	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	32	*	30	30	*	*	*	2	*	*	*	*	*	*	*
OTHER DHHS	83	31	16	16	*	*	*	7	29	*	*	*	*	*	*
ED, TOTAL	28	*	26	26	*	*	*	*	2	*	*	*	*	*	*
OE	16	*	14	14	*	*	*	*	2	*	*	*	*	*	*
OTHER ED	12	*	12	12	*	*	*	*	*	*	*	*	*	*	*
DOD	262	48	166	166	*	*	*	2	46	*	*	*	*	*	*
COMMERCE	55	8	*	*	*	*	*	*	47	*	*	*	*	*	*
USDA	89	5	67	67	*	*	*	*	17	*	*	*	*	*	*
DOT	14	14	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE	19	*	16	16	*	*	*	*	3	*	*	*	*	*	*
HUD	10	8	*	*	*	*	*	*	2	*	*	*	*	*	*
INTERIOR	28	*	28	28	*	*	*	*	*	*	*	*	*	*	*
OTHER	149	35	2	2	*	*	*	21	91	*	*	*	*	*	*
SOURCE UNKNOWN	18	*	18	18	*	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	1,235	224	1,003	1,001	2	*	*	*	*	*	*	*	*	*	8
SUPPORT STATUS UNKNOWN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	256	50	190	190	*	*	*	*	*	*	*	*	14	*	2
NOT EMPLOYED	95	*	*	*	*	*	*	*	*	*	*	*	*	95	*
COMPUTER SPECIALISTS															
TOTAL	9,066	5,212	3,010	2,954	49	7	20	276	355	23	48	104	*	18	*
TOTAL SUPPORTED	2,658	966	1,094	1,094	*	*	*	218	355	23	2	*	*	*	*
NASA	214	120	48	48	*	*	*	2	44	*	*	*	*	*	*
NSF	602	6	537	537	*	*	*	32	27	*	*	*	*	*	*
EPA	68	43	25	25	*	*	*	*	*	*	*	*	*	*	*
DOE	412	126	189	189	*	*	*	70	27	*	*	*	*	*	*
NRC	66	21	*	*	*	*	*	45	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	212	40	114	114	*	*	*	39	19	*	*	*	*	*	*
NIH	139	13	88	88	*	*	*	19	19	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	11	*	*	*	*	*	*	11	*	*	*	*	*	*	*
OTHER DHHS	64	27	28	28	*	*	*	9	*	*	*	*	*	*	*
ED, TOTAL	58	33	25	25	*	*	*	*	*	*	*	*	*	*	*
OE	3	*	3	3	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	55	33	22	22	*	*	*	*	*	*	*	*	*	*	*
DOD	1,150	616	266	266	*	*	*	139	106	23	*	*	*	*	*
COMMERCE	45	9	16	16	*	*	*	*	20	*	*	*	*	*	*
USDA	39	*	37	37	*	*	*	*	2	*	*	*	*	*	*
DOT	192	110	10	10	*	*	*	69	3	*	*	*	*	*	*
JUSTICE	42	39	*	*	*	*	*	*	3	*	*	*	*	*	*
HUD	2	*	*	*	*	*	*	2	*	*	*	*	*	*	*
INTERIOR	22	22	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	210	63	43	43	*	*	*	*	104	*	*	*	*	*	*
SOURCE UNKNOWN	17	2	13	13	*	*	*	*	*	*	2	*	*	*	*
SOURCE NOT REPORTED	43	14	29	29	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	4,891	3,236	1,467	1,424	43	*	*	45	*	*	46	97	*	*	*
SUPPORT STATUS UNKNOWN	175	37	131	118	6	7	*	*	*	*	*	7	*	*	*
NO REPORT	1,324	973	318	318	*	*	20	13	*	*	*	*	*	*	*
NOT EMPLOYED	18	*	*	*	*	*	*	*	*	*	*	*	*	18	*
ENVIRONMENTAL SCIENTISTS															
TOTAL	16,589	4,788	6,772	6,611	128	33	*	623	3,069	115	562	54	16	560	30
TOTAL SUPPORTED	8,176	1,009	3,227	3,194	33	*	*	435	3,069	115	283	13	16	*	9
NASA	1,076	119	455	455	*	*	*	46	447	*	*	*	9	*	*
NSF	1,805	12	1,544	1,511	33	*	*	160	67	*	15	7	*	*	*
EPA	1,126	356	270	270	*	*	*	74	342	*	78	6	*	*	*
DOE	1,383	340	651	651	*	*	*	181	167	*	35	*	*	*	9
NRC	188	10	118	118	*	*	*	13	41	*	6	*	*	*	*
AID	33	8	17	17	*	*	*	*	8	*	*	*	*	*	*
DHHS, TOTAL	90	8	69	69	*	*	*	2	11	*	*	*	*	*	*
NIH	79	8	62	62	*	*	*	*	9	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	2	*	*	*	*	*	*	2	*	*	*	*	*	*	*
OTHER DHHS	17	8	7	7	*	*	*	*	2	*	*	*	*	*	*
ED, TOTAL	14	*	14	14	*	*	*	*	*	*	*	*	*	*	*
OE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	14	*	14	14	*	*	*	*	*	*	*	*	*	*	*
DOD	1,337	260	470	470	*	*	*	164	396	46	1	*	*	*	*
COMMERCE	1,347	100	502	502	*	*	*	50	542	69	75	*	9	*	*
USDA	211	6	51	51	*	*	*	*	154	*	*	*	*	*	*
DOT	75	51	24	24	*	*	*	*	*	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	10	*	8	8	*	*	*	*	2	*	*	*	*	*	*
INTERIOR	1,816	67	463	463	*	*	*	43	1,157	*	86	*	*	*	*
OTHER	312	28	125	125	*	*	*	4	148	*	*	*	7	*	*
SOURCE UNKNOWN	60	*	37	37	*	*	*	18	1	*	4	*	*	*	*
SOURCE NOT REPORTED	22	*	22	22	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	5,858	3,046	2,454	2,348	82	24	*	99	*	*	234	25	*	*	*
SUPPORT STATUS UNKNOWN	160	7	153	151	2	*	*	*	*	*	*	*	*	*	*
NO REPORT	1,835	726	938	918	11	9	*	89	*	*	45	16	*	*	21
NOT EMPLOYED	560	*	*	*	*	*	*	*	*	*	*	*	*	560	*

* NO CASES REPORTED

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TABLE 8-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
EARTH SCIENTISTS															
TOTAL......................	12,605	4,213	5,019	4,858	128	33	*	309	2,060	23	412	54	7	484	24
TOTAL SUPPORTED..........	4,947	613	1,878	1,845	33	*	*	189	2,060	23	155	13	7	*	9
NASA....................	592	31	247	247	*	*	*	13	301	*	*	*	*	*	*
NSF.....................	835	*	769	736	33	*	*	26	33	*	*	7	*	*	*
EPA.....................	659	260	111	111	*	*	*	65	147	*	70	6	*	*	*
DOE.....................	938	240	432	432	*	*	*	87	144	*	26	*	*	*	9
NRC.....................	175	10	118	118	*	*	*	13	28	*	6	*	*	*	*
AID.....................	27	8	11	11	*	*	*	*	8	*	*	*	*	*	*
DHHS, TOTAL.............	79	8	67	67	*	*	*	2	2	*	*	*	*	*	*
NIH....................	68	8	60	60	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	2	*	*	*	*	*	*	2	*	*	*	*	*	*	*
OTHER DHHS.............	17	8	7	7	*	*	*	*	2	*	*	*	*	*	*
ED, TOTAL...............	14	*	14	14	*	*	*	*	*	*	*	*	*	*	*
DE.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED...............	14	*	14	14	*	*	*	*	*	*	*	*	*	*	*
DOD.....................	395	83	108	108	*	*	*	84	120	*	*	*	*	*	*
COMMERCE................	298	75	81	81	*	*	*	13	106	23	*	*	*	*	*
USDA....................	198	6	45	45	*	*	*	*	147	*	*	*	*	*	*
DOT.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD.....................	10	*	8	8	*	*	*	*	2	*	*	*	*	*	*
INTERIOR................	1,606	67	381	381	*	*	*	28	1,077	*	53	*	*	*	*
OTHER...................	291	28	109	109	*	*	*	2	145	*	*	*	7	*	*
SOURCE UNKNOWN..........	54	*	36	36	*	*	*	18	*	*	*	*	*	*	*
SOURCE NOT REPORTED....	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED............	5,426	2,883	2,212	2,106	82	24	*	90	*	*	216	25	*	*	*
SUPPORT STATUS UNKNOWN..	88	7	81	79	2	*	*	*	*	*	*	*	*	*	*
NO REPORT................	1,660	710	848	828	11	9	*	30	*	*	41	16	*	*	15
NOT EMPLOYED.............	484	*	*	*	*	*	*	*	*	*	*	*	*	484	*
OCEANOGRAPHERS															
TOTAL......................	1,818	184	964	964	*	*	*	86	367	29	137	*	9	36	6
TOTAL SUPPORTED..........	1,505	151	740	740	*	*	*	86	367	29	123	*	9	*	*
NASA....................	50	12	6	6	*	*	*	*	23	*	*	*	9	*	*
NSF.....................	488	6	391	391	*	*	*	59	18	*	14	*	*	*	*
EPA.....................	180	64	87	87	*	*	*	9	12	*	8	*	*	*	*
DOE.....................	195	50	83	83	*	*	*	36	17	*	9	*	*	*	*
NRC.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AID.....................	6	*	6	6	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL.............	11	*	2	2	*	*	*	*	9	*	*	*	*	*	*
NIH....................	11	*	2	2	*	*	*	*	9	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DE.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD.....................	418	41	214	214	*	*	*	32	123	8	*	*	*	*	*
COMMERCE................	669	25	351	351	*	*	*	31	157	21	75	*	9	*	*
USDA....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOT.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR................	152	*	39	39	*	*	*	9	71	*	33	*	*	*	*
OTHER...................	17	*	12	12	*	*	*	2	3	*	*	*	*	*	*
SOURCE UNKNOWN..........	1	*	*	*	*	*	*	*	1	*	*	*	*	*	*
SOURCE NOT REPORTED....	15	*	15	15	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED............	188	33	143	143	*	*	*	*	*	*	12	*	*	*	*
SUPPORT STATUS UNKNOWN..	12	*	12	12	*	*	*	*	*	*	*	*	*	*	*
NO REPORT................	77	*	69	69	*	*	*	*	*	*	2	*	*	*	6
NOT EMPLOYED.............	36	*	*	*	*	*	*	*	*	*	*	*	*	36	*
ATMOSPHERIC SCIENTISTS															
TOTAL......................	2,166	391	789	789	*	*	*	228	642	63	13	*	*	40	*
TOTAL SUPPORTED..........	1,724	245	609	609	*	*	*	160	642	63	5	*	*	*	*
NASA....................	434	76	202	202	*	*	*	33	123	*	*	*	*	*	*
NSF.....................	482	6	384	384	*	*	*	75	16	*	1	*	*	*	*
EPA.....................	287	32	72	72	*	*	*	*	183	*	*	*	*	*	*
DOE.....................	250	50	136	136	*	*	*	58	6	*	*	*	*	*	*
NRC.....................	13	*	*	*	*	*	*	*	13	*	*	*	*	*	*
AID.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NIH....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DE.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD.....................	524	136	148	148	*	*	*	48	153	38	1	*	*	*	*
COMMERCE................	380	*	70	70	*	*	*	6	279	25	*	*	*	*	*
USDA....................	13	*	6	6	*	*	*	*	7	*	*	*	*	*	*
DOT.....................	75	51	24	24	*	*	*	*	*	*	*	*	*	*	*
JUSTICE.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR................	58	*	43	43	*	*	*	6	9	*	*	*	*	*	*
OTHER...................	4	*	4	4	*	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN..........	5	*	1	1	*	*	*	*	*	*	4	*	*	*	*
SOURCE NOT REPORTED....	7	*	7	7	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED............	244	130	99	99	*	*	*	9	*	*	6	*	*	*	*
SUPPORT STATUS UNKNOWN..	60	*	60	60	*	*	*	*	*	*	*	*	*	*	*
NO REPORT................	98	16	21	21	*	*	*	59	*	*	2	*	*	*	*
NOT EMPLOYED.............	40	*	*	*	*	*	*	*	*	*	*	*	*	40	*

* NO CASES REPORTED

TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
ENGINEERS															
TOTAL	58,311	31,659	18,083	18,018	35	30	18	2,338	3,805	504	135	222	160	1,358	29
TOTAL SUPPORTED	22,296	7,477	8,473	8,471	2	*	18	1,928	3,805	504	32	24	35	*	*
NASA	2,926	1,163	951	951	*	*	*	134	673	5	*	*	*	*	*
NSF	2,391	273	1,995	1,995	*	*	*	33	84	6	*	*	*	*	*
EPA	897	485	267	267	*	*	*	35	65	23	6	16	*	*	*
DOE	6,418	2,338	2,594	2,594	*	*	*	974	476	6	22	8	*	*	*
NRC	751	216	156	156	*	*	*	304	75	*	*	*	*	*	*
AID	65	14	46	46	*	*	*	*	*	5	*	*	*	*	*
DHHS, TOTAL	934	45	804	804	*	*	*	18	47	20	*	*	*	*	*
NIH	867	45	767	767	*	*	*	2	47	6	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	37	*	37	37	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	30	*	*	*	*	*	*	16	*	14	*	*	*	*	*
ED, TOTAL	179	*	179	177	2	*	*	*	*	*	*	*	*	*	*
OE	43	*	43	43	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	136	*	136	134	2	*	*	*	*	*	*	*	*	*	*
DOD	8,646	3,809	1,911	1,911	*	*	7	735	1,717	467	*	*	*	*	*
COMMERCE	722	91	334	332	2	*	*	36	255	6	*	*	*	*	*
USDA	856	15	640	640	*	*	*	16	185	*	*	*	*	*	*
DOT	1,022	312	407	407	*	*	*	73	212	6	4	8	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	127	127	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	1,035	229	588	588	*	*	*	64	148	6	*	*	*	*	*
OTHER	641	201	153	153	*	*	11	72	204	*	*	*	*	*	*
SOURCE UNKNOWN	276	189	33	33	*	*	*	*	19	*	*	*	35	*	*
SOURCE NOT REPORTED	225	74	151	151	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	26,046	18,829	6,629	6,614	15	*	*	306	*	*	103	153	26	*	*
SUPPORT STATUS UNKNOWN	461	138	177	147	*	30	*	2	*	*	*	45	99	*	*
NO REPORT	8,150	5,215	2,804	2,786	18	*	*	102	*	*	*	*	*	*	29
NOT EMPLOYED	1,358	*	*	*	*	*	*	*	*	*	*	*	*	1,358	*
AERO/ASTRO ENGINEERS															
TOTAL	2,536	1,126	675	675	*	*	*	176	425	116	*	*	*	18	*
TOTAL SUPPORTED	1,964	735	512	512	*	*	*	176	425	116	*	*	*	*	*
NASA	848	355	232	232	*	*	*	3	258	*	*	*	*	*	*
NSF	196	*	196	196	*	*	*	*	*	*	*	*	*	*	*
EPA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOE	120	55	65	65	*	*	*	*	*	*	*	*	*	*	*
NRC	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NIH	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD	1,092	479	203	203	*	*	*	171	123	116	*	*	*	*	*
COMMERCE	44	*	44	44	*	*	*	*	*	*	*	*	*	*	*
USDA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOT	44	*	*	*	*	*	*	*	44	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	2	*	*	*	*	*	*	2	*	*	*	*	*	*	*
SOURCE UNKNOWN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	319	244	75	75	*	*	*	*	*	*	*	*	*	*	*
SUPPORT STATUS UNKNOWN	14	14	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	221	133	88	88	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	18	*	*	*	*	*	*	*	*	*	*	*	*	18	*
CHEMICAL ENGINEERS															
TOTAL	7,612	5,342	1,380	1,380	*	*	*	143	258	*	23	*	*	466	*
TOTAL SUPPORTED	1,656	635	664	664	*	*	*	99	258	*	*	*	*	*	*
NASA	224	2	198	198	*	*	*	*	24	*	*	*	*	*	*
NSF	308	50	258	258	*	*	*	*	*	*	*	*	*	*	*
EPA	92	84	*	*	*	*	*	*	8	*	*	*	*	*	*
DOE	1,012	541	261	261	*	*	*	58	152	*	*	*	*	*	*
NRC	76	35	*	*	*	*	*	41	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	59	*	59	59	*	*	*	*	*	*	*	*	*	*	*
NIH	59	*	59	59	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL	76	*	76	76	*	*	*	*	*	*	*	*	*	*	*
OE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	76	*	76	76	*	*	*	*	*	*	*	*	*	*	*
DOD	207	115	72	72	*	*	*	4	16	*	*	*	*	*	*
COMMERCE	133	*	98	98	*	*	*	*	35	*	*	*	*	*	*
USDA	46	*	*	*	*	*	*	*	46	*	*	*	*	*	*
DOT	2	2	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	35	35	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	123	35	76	76	*	*	*	*	12	*	*	*	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	4,643	4,148	428	428	*	*	*	44	*	*	23	*	*	*	*
SUPPORT STATUS UNKNOWN	35	*	35	35	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	812	559	253	253	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	466	*	*	*	*	*	*	*	*	*	*	*	*	466	*

* NO CASES REPORTED

BEST COPY AVAILABLE

TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
CIVIL ENGINEERS															
TOTAL	6,032	2,468	2,789	2,786	3	*	7	69	147	131	88	104	99	126	4
TOTAL SUPPORTED	1,955	552	1,017	1,017	*	*	7	69	147	131	8	24	*	*	*
NASA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NSF	385	62	282	282	*	*	*	*	35	6	*	*	*	*	*
EPA	529	273	209	209	*	*	*	*	4	23	4	16	*	*	*
DOE	272	43	111	111	*	*	*	69	35	6	*	8	*	*	*
NRC	63	25	*	*	*	*	*	23	15	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	40	*	40	40	*	*	*	*	*	*	*	*	*	*	*
NIH	40	*	40	40	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD	250	23	65	65	*	*	7	*	41	114	*	*	*	*	*
COMMERCE	36	*	30	30	*	*	*	*	*	6	*	*	*	*	*
USDA	10	*	2	2	*	*	*	*	8	*	*	*	*	*	*
DOT	466	173	216	216	*	*	*	*	59	6	4	8	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	43	43	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	411	102	254	254	*	*	*	*	49	6	*	*	*	*	*
OTHER	54	*	48	48	*	*	*	*	6	*	*	*	*	*	*
SOURCE UNKNOWN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED	14	*	14	14	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	2,867	1,576	1,176	1,176	*	*	*	*	*	*	80	35	*	*	*
SUPPORT STATUS UNKNOWN	191	7	40	40	*	*	*	*	*	*	*	45	99	*	*
NO REPORT	893	333	556	553	3	*	*	*	*	*	*	*	*	*	4
NOT EMPLOYED	126	*	*	*	*	*	*	*	*	*	*	*	*	126	*
ELEC./ELECTRON. ENGINEERS															
TOTAL	10,834	6,189	3,630	3,630	*	*	*	264	524	3	*	60	*	164	*
TOTAL SUPPORTED	4,007	1,593	1,626	1,626	*	*	*	261	524	3	*	*	*	*	*
NASA	632	345	173	173	*	*	*	31	83	*	*	*	*	*	*
NSF	373	24	349	349	*	*	*	*	*	*	*	*	*	*	*
EPA	35	*	35	35	*	*	*	*	*	*	*	*	*	*	*
DOE	574	17	385	385	*	*	*	172	*	*	*	*	*	*	*
NRC	24	*	*	*	*	*	*	24	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	97	*	94	94	*	*	*	2	1	*	*	*	*	*	*
NIH	97	*	94	94	*	*	*	2	1	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD	2,235	1,229	561	561	*	*	*	71	371	3	*	*	*	*	*
COMMERCE	71	*	*	*	*	*	*	3	68	*	*	*	*	*	*
USDA	11	*	11	11	*	*	*	*	*	*	*	*	*	*	*
DOT	131	56	74	74	*	*	*	*	1	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	89	*	89	89	*	*	*	*	*	*	*	*	*	*	*
OTHER	156	40	94	94	*	*	*	22	*	*	*	*	*	*	*
SOURCE UNKNOWN	38	38	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED	81	2	79	79	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	4,640	3,086	1,491	1,491	*	*	*	3	*	*	*	60	*	*	*
SUPPORT STATUS UNKNOWN	84	58	26	26	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	1,939	1,452	487	487	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	164	*	*	*	*	*	*	*	*	*	*	*	*	164	*
MATERIALS SCI. ENGINEERS															
TOTAL	6,238	4,067	1,496	1,496	*	*	*	178	388	*	*	*	*	109	*
TOTAL SUPPORTED	2,052	758	792	792	*	*	*	114	388	*	*	*	*	*	*
NASA	274	63	78	78	*	*	*	16	117	*	*	*	*	*	*
NSF	367	27	310	310	*	*	*	16	14	*	*	*	*	*	*
EPA	52	36	*	*	*	*	*	16	*	*	*	*	*	*	*
DOE	871	474	353	353	*	*	*	17	27	*	*	*	*	*	*
NRC	33	16	*	*	*	*	*	17	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	78	*	62	62	*	*	*	16	*	*	*	*	*	*	*
NIH	62	*	62	62	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	16	*	*	*	*	*	*	16	*	*	*	*	*	*	*
ED, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD	741	250	255	255	*	*	*	97	139	*	*	*	*	*	*
COMMERCE	108	*	35	35	*	*	*	16	57	*	*	*	*	*	*
USDA	40	*	24	24	*	*	*	16	*	*	*	*	*	*	*
DOT	16	*	*	*	*	*	*	16	*	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	142	*	44	44	*	*	*	62	36	*	*	*	*	*	*
OTHER	62	*	*	*	*	*	*	16	46	*	*	*	*	*	*
SOURCE UNKNOWN	46	46	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED	32	2	30	30	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	3,278	2,805	446	446	*	*	*	27	*	*	*	*	*	*	*
SUPPORT STATUS UNKNOWN	23	23	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	776	481	258	258	*	*	*	37	*	*	*	*	*	*	*
NOT EMPLOYED	109	*	*	*	*	*	*	*	*	*	*	*	*	109	*

* NO CASES REPORTED

BEST COPY AVAILABLE

TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1985
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
MECHANICAL ENGINEERS															
TOTAL	5,577	2,645	2,139	2,136	3	*	*	263	322	*	*	2	*	206	*
TOTAL SUPPORTED	1,880	636	708	708	*	*	*	214	322	*	*	*	*	*	*
NASA	273	77	117	117	*	*	*	63	16	*	*	*	*	*	*
NSF	257	*	257	257	*	*	*	*	*	*	*	*	*	*	*
EPA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOE	831	309	273	273	*	*	*	168	81	*	*	*	*	*	*
NRC	114	75	23	23	*	*	*	16	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	24	*	24	24	*	*	*	*	*	*	*	*	*	*	*
NIH	24	*	24	24	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD	703	249	278	278	*	*	*	30	146	*	*	*	*	*	*
COMMERCE	123	*	44	44	*	*	*	*	79	*	*	*	*	*	*
USDA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOT	3	*	3	3	*	*	*	*	*	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	28	28	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN	20	20	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	2,568	1,437	1,087	1,084	3	*	*	42	*	*	*	2	*	*	*
SUPPORT STATUS UNKNOWN	16	1	15	15	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	907	571	329	329	*	*	*	7	*	*	*	*	*	*	*
NOT EMPLOYED	206	*	*	*	*	*	*	*	*	*	*	*	*	206	*
NUCLEAR ENGINEERS															
TOTAL	2,061	1,057	634	634	*	*	*	242	72	*	*	56	*	*	*
TOTAL SUPPORTED	1,149	454	381	381	*	*	*	242	72	*	*	*	*	*	*
NASA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NSF	14	*	14	14	*	*	*	*	*	*	*	*	*	*	*
EPA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOE	728	320	302	302	*	*	*	106	*	*	*	*	*	*	*
NRC	352	65	109	109	*	*	*	143	35	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NIH	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD	188	89	70	70	*	*	*	7	22	*	*	*	*	*	*
COMMERCE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
USDA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	37	22	*	*	*	*	*	*	15	*	*	*	*	*	*
SOURCE UNKNOWN	14	*	14	14	*	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED	46	46	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	591	399	136	136	*	*	*	*	*	*	*	56	*	*	*
SUPPORT STATUS UNKNOWN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	321	204	117	117	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS															
TOTAL	5,366	2,993	992	992	*	*	*	525	702	89	24	*	24	17	*
TOTAL SUPPORTED	2,841	1,091	450	450	*	*	*	485	702	89	24	*	*	*	*
NASA	244	117	*	*	*	*	*	21	106	*	*	*	*	*	*
NSF	98	59	39	39	*	*	*	*	*	*	*	*	*	*	*
EPA	36	29	*	*	*	*	*	2	3	*	2	*	*	*	*
DOE	574	127	198	198	*	*	*	163	64	*	22	*	*	*	*
NRC	40	*	*	*	*	*	*	40	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	25	*	25	25	*	*	*	*	*	*	*	*	*	*	*
NIH	25	*	25	25	*	*	*	*	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED, TOTAL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD	1,768	813	143	143	*	*	*	295	428	89	*	*	*	*	*
COMMERCE	32	29	*	*	*	*	*	*	3	*	*	*	*	*	*
USDA	12	1	*	*	*	*	*	*	11	*	*	*	*	*	*
DOT	179	43	91	91	*	*	*	18	27	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	35	35	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	149	74	2	2	*	*	*	32	41	*	*	*	*	*	*
SOURCE UNKNOWN	104	85	*	*	*	*	*	*	19	*	*	*	*	*	*
SOURCE NOT REPORTED	19	19	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	1,867	1,449	394	394	*	*	*	*	*	*	*	*	24	*	*
SUPPORT STATUS UNKNOWN	33	33	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	608	420	148	148	*	*	*	40	*	*	*	*	*	*	*
NOT EMPLOYED	17	*	*	*	*	*	*	*	*	*	*	*	*	17	*

* NO CASES REPORTED

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TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
OTHER ENGINEERS															
TOTAL	12,055	5,772	4,348	4,289	29	30	11	478	967	165	*	*	37	252	25
TOTAL SUPPORTED	4,792	1,023	2,323	2,321	2	*	11	268	967	165	*	*	35	*	*
NASA	431	204	153	153	*	*	*	*	69	5	*	*	*	*	*
NSF	395	51	292	292	*	*	*	17	35	*	*	*	*	*	*
EPA	153	63	23	23	*	*	*	17	50	*	*	*	*	*	*
DOE	1,436	452	646	646	*	*	*	221	117	*	*	*	*	*	*
NRC	49	*	24	24	*	*	*	*	25	*	*	*	*	*	*
AID	65	14	46	46	*	*	*	*	*	5	*	*	*	*	*
DHHS, TOTAL	611	45	500	500	*	*	*	*	46	20	*	*	*	*	*
NIH	560	45	463	463	*	*	*	*	46	6	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	37	*	37	37	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	14	*	*	*	*	*	*	*	*	14	*	*	*	*	*
ED, TOTAL	103	*	103	101	2	*	*	*	*	*	*	*	*	*	*
OE	43	*	43	43	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	60	*	60	58	2	*	*	*	*	*	*	*	*	*	*
DOD	1,462	562	264	264	*	*	*	60	431	165	*	*	*	*	*
COMMERCE	175	62	83	81	2	*	*	17	13	*	*	*	*	*	*
USDA	737	14	603	603	*	*	*	*	120	*	*	*	*	*	*
DOT	181	38	23	23	*	*	*	39	81	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	14	14	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	270	92	125	125	*	*	*	2	51	*	*	*	*	*	*
OTHER	153	37	9	9	*	*	11	*	96	*	*	*	*	*	*
SOURCE UNKNOWN	54	*	19	19	*	*	*	*	*	*	*	*	35	*	*
SOURCE NOT REPORTED	33	5	28	28	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	5,273	3,685	1,396	1,384	12	*	*	190	*	*	*	*	2	*	*
SUPPORT STATUS UNKNOWN	65	2	61	31	*	30	*	2	*	*	*	*	*	*	*
NO REPORT	1,673	1,062	568	553	15	*	*	18	*	*	*	*	*	*	25
NOT EMPLOYED	252	*	*	*	*	*	*	*	*	*	*	*	*	252	*
LIFE SCIENTISTS															
TOTAL	93,848	13,473	56,787	55,528	1,127	132	2,974	3,165	7,590	764	1,265	378	152	7,133	167
TOTAL SUPPORTED	42,775	972	29,102	28,935	145	22	1,534	1,944	7,590	764	632	191	42	*	6
NASA	305	7	231	231	*	*	7	*	60	*	*	*	*	*	*
NSF	4,262	66	3,833	3,769	64	*	14	248	101	*	*	*	*	*	*
EPA	1,377	177	696	689	7	*	*	119	279	12	78	16	*	*	*
DOE	1,543	253	879	879	*	*	23	316	72	*	*	*	*	*	*
NRC	131	20	81	81	*	*	*	23	7	*	*	*	*	*	*
AID	617	24	461	461	*	*	*	65	60	*	7	*	*	*	*
DHHS, TOTAL	22,961	415	17,432	17,413	19	*	748	1,407	2,183	335	271	124	42	*	6
NIH	20,219	309	16,114	16,102	12	*	664	1,270	1,536	171	133	18	*	*	6
ALCOHOL/DRUG ABUSE&MHA	1,339	39	1,009	1,007	2	*	67	62	75	13	43	31	*	*	*
OTHER DHHS	2,024	99	793	788	5	*	30	102	610	171	102	75	42	*	*
ED, TOTAL	286	7	238	200	16	22	5	8	22	*	6	*	*	*	*
OE	[illegible]	*	106	106	*	*	5	8	*	*	*	*	*	*	*
OTHER ED	[illegible]	7	139	101	16	22	*	*	22	*	6	*	*	*	*
DOD	1,[illegible]5	110	430	430	*	*	96	54	498	407	*	*	*	*	*
COMMERCE	752	21	454	454	*	*	7	24	148	2	57	39	*	*	*
USDA	10,380	69	6,791	6,781	10	*	*	99	3,322	*	92	7	*	*	*
DOT	88	7	27	27	*	*	*	*	25	14	15	*	*	*	*
JUSTICE	35	*	25	25	*	*	*	*	10	*	*	*	*	*	*
HUD	18	12	*	*	*	*	*	6	*	*	*	*	*	*	*
INTERIOR	1,750	36	788	788	*	*	7	64	674	*	142	39	*	*	*
OTHER	2,626	41	922	922	*	*	787	76	489	29	19	19	34	*	*
SOURCE UNKNOWN	357	*	238	193	45	*	7	*	66	*	39	7	*	*	*
SOURCE NOT REPORTED	326	30	273	273	*	*	6	17	*	*	*	*	*	*	*
NOT SUPPORTED	30,199	9,479	18,194	17,400	720	74	987	897	*	*	403	146	84	*	9
SUPPORT STATUS UNKNOWN	1,892	155	1,510	1,341	160	9	90	54	*	*	65	18	*	*	*
NO REPORT	11,849	2,867	7,981	7,852	102	27	363	270	*	*	165	23	26	*	154
NOT EMPLOYED	7,133	*	*	*	*	*	*	*	*	*	*	*	*	7,133	*
BIOLOGICAL SCIENTISTS															
TOTAL	56,442	5,330	35,840	34,828	909	103	1,181	2,272	4,156	200	481	88	34	6,769	91
TOTAL SUPPORTED	25,272	616	17,766	17,645	121	*	792	1,491	4,156	200	195	18	34	*	6
NASA	201	*	159	159	*	*	7	*	35	*	*	*	*	*	*
NSF	3,730	52	3,350	3,286	64	*	7	228	93	*	*	*	*	*	*
EPA	823	132	356	356	*	*	*	80	189	*	57	9	*	*	*
DOE	1,032	170	586	586	*	*	23	240	13	*	*	*	*	*	*
NRC	89	13	67	67	*	*	*	9	*	*	*	*	*	*	*
AID	85	7	58	58	*	*	*	13	*	*	7	*	*	*	*
DHHS, TOTAL	16,061	252	12,497	12,485	12	*	470	1,116	1,526	81	79	2	34	*	6
NIH	15,031	241	11,945	11,933	12	*	455	1,078	1,205	61	62	*	*	*	6
ALCOHOL/DRUG ABUSE&MHA	433	*	361	361	*	*	7	18	33	7	7	*	*	*	*
OTHER DHHS	848	11	386	386	*	*	21	67	312	20	15	2	34	*	*
ED, TOTAL	140	7	125	109	16	*	*	8	*	*	*	*	*	*	*
OE	63	*	55	55	*	*	*	8	*	*	*	*	*	*	*
OTHER ED	84	7	77	61	16	*	*	*	*	*	*	*	*	*	*
DOD	942	76	256	256	*	*	59	28	404	119	*	*	*	*	*
COMMERCE	438	10	269	269	*	*	*	24	135	*	*	*	*	*	*
USDA	3,476	29	1,947	1,947	*	*	*	70	1,402	*	28	*	*	*	*
DOT	12	*	*	*	*	*	*	*	7	*	5	*	*	*	*
JUSTICE	13	*	6	6	*	*	*	*	7	*	*	*	*	*	*
HUD	18	12	*	*	*	*	*	6	*	*	*	*	*	*	*
INTERIOR	686	29	332	332	*	*	7	52	260	*	6	*	*	*	*
OTHER	1,127	7	454	454	*	*	307	56	262	*	*	7	34	*	*
SOURCE UNKNOWN	252	*	174	129	45	*	*	*	39	*	39	*	*	*	*
SOURCE NOT REPORTED	141	6	115	115	*	*	6	14	*	*	*	*	*	*	*
NOT SUPPORTED	16,859	3,677	12,077	11,466	544	67	284	568	*	*	196	57	*	*	*
SUPPORT STATUS UNKNOWN	1,002	74	825	672	144	9	14	54	*	*	23	12	*	*	*
NO REPORT	6,540	963	5,172	5,045	100	27	91	159	*	*	67	1	*	*	87
NOT EMPLOYED	6,769	*	*	*	*	*	*	*	*	*	*	*	*	6,769	*

* NO CASES REPORTED

TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
AGRICULTURAL SCIENTISTS															
TOTAL	17,270	3,450	9,147	8,974	151	22	3	284	2,435	9	393	39	84	1,391	35
TOTAL SUPPORTED	8,503	91	5,615	5,583	10	22	*	94	2,435	9	220	39	*	*	*
NASA	38	*	26	26	*	*	*	*	12	*	*	*	*	*	*
NSF	293	7	281	281	*	*	*	5	*	*	*	*	*	*	*
EPA	246	*	188	188	*	*	*	*	45	*	13	*	*	*	*
DOE	228	19	150	150	*	*	*	11	48	*	*	*	*	*	*
NRC	7	*	7	7	*	*	*	*	*	*	*	*	*	*	*
AID	487	10	375	375	*	*	*	52	50	*	*	*	*	*	*
DHHS, TOTAL	83	*	54	54	*	*	*	5	24	*	*	*	*	*	*
NIH	52	*	47	47	*	*	*	5	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	31	*	7	7	*	*	*	*	24	*	*	*	*	*	*
ED, TOTAL	48	*	37	15	*	22	*	*	11	*	*	*	*	*	*
OE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ED	48	*	37	15	*	22	*	*	11	*	*	*	*	*	*
DOD	127	*	68	68	*	*	*	*	52	7	*	*	*	*	*
COMMERCE	293	4	178	178	*	*	*	*	13	2	57	39	*	*	*
USDA	6,553	40	4,571	4,561	10	*	*	23	1,862	*	57	*	*	*	*
DOT	30	*	20	20	*	*	*	*	*	*	10	*	*	*	*
JUSTICE	19	*	19	19	*	*	*	*	*	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	1,052	7	444	444	*	*	*	12	414	*	136	39	*	*	*
OTHER	309	8	200	200	*	*	*	12	89	*	*	*	*	*	*
SOURCE UNKNOWN	31	*	20	20	*	*	*	*	11	*	*	*	*	*	*
SOURCE NOT REPORTED	118	17	98	98	*	*	*	3	*	*	*	*	*	*	*
NOT SUPPORTED	4,985	2,563	2,096	1,966	130	*	3	143	*	*	96	*	84	*	*
SUPPORT STATUS UNKNOWN	282	11	260	249	11	*	*	*	*	*	11	*	*	*	*
NO REPORT	2,109	785	1,176	1,176	*	*	*	47	*	*	66	*	*	*	35
NOT EMPLOYED	1,391	*	*	*	*	*	*	*	*	*	*	*	*	1,391	*
MEDICAL SCIENTISTS															
TOTAL	22,136	4,693	11,800	11,726	67	7	1,790	609	999	555	391	251	34	973	41
TOTAL SUPPORTED	9,000	265	5,721	5,707	14	*	742	359	999	555	217	134	8	*	*
NASA	66	7	46	46	*	*	*	*	13	*	*	*	*	*	*
NSF	239	7	202	202	*	*	7	15	8	*	*	*	*	*	*
EPA	308	45	152	145	7	*	*	39	45	12	8	7	*	*	*
DOE	283	64	143	143	*	*	*	65	11	*	*	*	*	*	*
NRC	35	7	7	7	*	*	*	14	7	*	*	*	*	*	*
AID	45	7	28	28	*	*	*	*	10	*	*	*	*	*	*
DHHS, TOTAL	6,817	163	4,881	4,874	7	*	278	286	633	254	192	122	8	*	*
NIH	5,116	68	4,122	4,122	*	*	209	187	331	110	71	18	*	*	*
ALCOHOL/DRUG ABUSE&MHA	906	39	648	646	2	*	60	44	42	6	36	31	*	*	*
OTHER DHHS	1,145	88	400	395	5	*	9	55	274	151	87	73	8	*	*
ED, TOTAL	98	*	76	76	*	*	5	*	11	*	6	*	*	*	*
OE	56	*	51	51	*	*	5	*	*	*	*	*	*	*	*
OTHER ED	42	*	25	25	*	*	*	*	11	*	6	*	*	*	*
DOD	526	34	106	106	*	*	37	26	42	281	*	*	*	*	*
COMMERCE	21	7	7	7	*	*	7	*	*	*	*	*	*	*	*
USDA	351	*	273	273	*	*	*	6	58	*	7	7	*	*	*
DOT	46	7	7	7	*	*	*	*	18	14	*	*	*	*	*
JUSTICE	3	*	*	*	*	*	*	*	3	*	*	*	*	*	*
HUD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	12	*	12	12	*	*	*	*	*	*	*	*	*	*	*
OTHER	990	26	268	268	*	*	480	18	138	29	19	12	*	*	*
SOURCE UNKNOWN	74	*	44	44	*	*	7	*	16	*	*	7	*	*	*
SOURCE NOT REPORTED	67	7	60	60	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	8,355	3,239	4,021	3,963	46	7	700	186	*	*	111	89	*	*	9
SUPPORT STATUS UNKNOWN	608	70	425	420	5	*	76	*	*	*	31	6	*	*	*
NO REPORT	3,200	1,119	1,633	1,631	2	*	272	64	*	*	32	22	26	*	32
NOT EMPLOYED	973	*	*	*	*	*	*	*	*	*	*	*	*	973	*
PSYCHOLOGISTS															
TOTAL	45,416	10,145	21,833	19,195	987	1,651	6,194	1,693	1,211	221	982	733	5	2,352	47
TOTAL SUPPORTED	11,480	1,105	5,165	4,567	94	504	2,497	755	1,211	221	289	232	5	*	*
NASA	82	15	65	65	*	*	*	*	2	*	*	*	*	*	*
NSF	635	*	611	607	4	*	*	24	*	*	*	*	*	*	*
EPA	44	*	44	44	*	*	*	*	*	*	*	*	*	*	*
DOE	174	22	50	50	*	*	24	30	48	*	*	*	*	*	*
NRC	47	*	22	22	*	*	*	25	*	*	*	*	*	*	*
AID	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	5,934	455	2,920	2,891	3	26	1,343	507	293	38	187	186	5	*	*
NIH	2,437	148	1,604	1,601	3	*	366	201	62	*	27	29	*	*	*
ALCOHOL/DRUG ABUSE&MHA	3,188	143	1,307	1,303	*	4	1,038	303	158	*	74	165	*	*	*
OTHER DHHS	736	164	228	206	*	22	73	28	73	38	106	21	5	*	*
ED, TOTAL	1,378	152	1,049	703	45	301	5	80	33	*	59	*	*	*	*
OE	448	28	339	304	3	32	5	47	4	*	25	*	*	*	*
OTHER ED	962	124	738	427	42	269	*	37	29	*	34	*	*	*	*
DOD	1,333	318	284	259	25	*	55	55	438	183	*	*	*	*	*
COMMERCE	84	*	*	*	*	*	*	*	84	*	*	*	*	*	*
USDA	69	*	43	43	*	*	*	4	22	*	*	*	*	*	*
DOT	98	35	33	33	*	*	*	30	*	*	*	*	*	*	*
JUSTICE	219	26	89	79	10	*	36	25	41	*	*	2	*	*	*
HUD	12	*	4	4	*	*	5	3	*	*	*	*	*	*	*
INTERIOR	125	13	57	57	*	*	*	*	55	*	*	*	*	*	*
OTHER	1,885	97	409	341	7	61	984	16	337	*	33	9	*	*	*
SOURCE UNKNOWN	458	50	207	128	*	79	137	25	*	*	8	31	*	*	*
SOURCE NOT REPORTED	251	66	106	47	*	59	60	*	*	*	15	4	*	*	*
NOT SUPPORTED	22,802	6,667	12,510	11,237	660	613	2,241	688	*	*	444	252	*	*	*
SUPPORT STATUS UNKNOWN	1,957	219	923	626	26	271	534	25	*	*	144	112	*	*	*
NO REPORT	6,825	2,154	3,235	2,765	207	263	922	225	*	*	105	137	*	*	47
NOT EMPLOYED	2,352	*	*	*	*	*	*	*	*	*	*	*	*	2,352	*

* NO CASES REPORTED

TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
SOCIAL SCIENTISTS															
TOTAL	56,473	4,721	39,252	37,513	1,245	494	138	2,152	3,862	232	1,202	477	645	3,527	265
TOTAL SUPPORTED	12,650	1,071	5,537	5,425	103	9	82	1,153	3,862	232	406	214	66	*	27
NASA	198	47	40	40	*	*	*	*	71	*	*	*	40	*	*
NSF	1,290	2	1,124	1,088	36	*	*	15	84	*	*	*	40	*	25
EPA	260	153	12	12	*	*	*	12	5	*	31	7	40	*	*
DOE	510	84	189	189	*	*	*	134	103	*	*	*	*	*	*
NRC	52	13	*	*	*	*	*	39	*	*	*	*	*	*	*
AID	679	66	182	182	*	*	*	294	137	*	*	*	*	*	*
DHHS, TOTAL	1,980	92	960	955	5	*	12	271	415	9	170	11	40	*	*
NIH	593	2	417	417	*	*	*	132	18	*	24	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	634	38	366	361	5	*	9	74	92	*	53	2	*	*	*
OTHER DHHS	884	54	746	246	*	*	3	100	305	9	118	9	40	*	*
ED, TOTAL	1,072	145	814	805	3	6	26	26	39	*	22	*	*	*	*
OE	254	82	153	153	*	*	*	19	*	*	*	*	*	*	*
OTHER ED	821	63	661	652	3	6	26	10	39	*	22	*	*	*	*
DOD	997	226	200	200	*	*	27	39	250	223	*	32	*	*	*
COMMERCE	624	65	212	212	*	*	*	46	175	*	39	47	40	*	*
USDA	741	20	397	397	*	*	*	13	307	*	2	*	*	*	2
DOT	330	135	109	109	*	*	*	*	*	*	*	46	40	*	*
JUSTICE	497	126	207	207	*	*	*	71	53	*	29	11	*	*	*
HUD	432	36	161	161	*	*	*	71	86	*	65	13	*	*	*
INTERIOR	800	76	372	345	27	*	*	11	265	*	36	*	40	*	*
OTHER	3,687	311	1,138	1,067	68	3	17	193	1,806	*	104	57	66	*	*
SOURCE UNKNOWN	349	2	238	238	*	*	*	43	66	*	*	*	*	*	*
SOURCE NOT REPORTED	76	*	72	72	*	*	*	4	*	*	*	*	*	*	*
NOT SUPPORTED	30,691	2,460	26,243	24,911	938	394	56	721	*	*	574	204	433	*	*
SUPPORT STATUS UNKNOWN	717	34	601	481	103	17	*	13	*	*	37	32	*	*	*
NO REPORT	8,888	1,156	6,871	6,696	101	74	*	265	*	*	185	27	146	*	238
NOT EMPLOYED	3,527	*	*	*	*	*	*	*	*	*	*	*	*	3,527	*
ECONOMISTS															
TOTAL	14,294	2,161	9,017	8,814	198	5	*	331	1,258	*	121	15	517	868	6
TOTAL SUPPORTED	3,153	420	1,207	1,207	*	*	*	226	1,258	*	39	*	*	*	3
NASA	47	47	*	*	*	*	*	*	*	*	*	*	*	*	*
NSF	162	*	154	154	*	*	*	5	*	*	*	*	*	*	3
EPA	144	132	*	*	*	*	*	12	*	*	*	*	*	*	*
DOE	296	74	61	61	*	*	*	88	73	*	*	*	*	*	*
NRC	13	13	*	*	*	*	*	*	*	*	*	*	*	*	*
AID	202	65	48	48	*	*	*	89	*	*	*	*	*	*	*
DHHS, TOTAL	162	32	51	51	*	*	*	22	57	*	*	*	*	*	*
NIH	70	*	48	48	*	*	*	22	*	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	3	*	3	3	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS	89	32	*	*	*	*	*	*	57	*	*	*	*	*	*
ED, TOTAL	12	*	9	9	*	*	*	3	*	*	*	*	*	*	*
OE	7	*	4	4	*	*	*	3	*	*	*	*	*	*	*
OTHER ED	8	*	5	5	*	*	*	3	*	*	*	*	*	*	*
DOD	255	92	102	102	*	*	*	17	44	*	*	*	*	*	*
COMMERCE	395	65	149	149	*	*	*	*	142	*	39	*	*	*	*
USDA	264	2	117	117	*	*	*	6	139	*	*	*	*	*	*
DOT	69	69	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE	30	13	*	*	*	*	*	*	17	*	*	*	*	*	*
HUD	136	18	71	71	*	*	*	4	4	*	39	*	*	*	*
INTERIOR	231	67	109	109	*	*	*	11	44	*	*	*	*	*	*
OTHER	1,238	131	364	364	*	*	*	8	735	*	*	*	*	*	*
SOURCE UNKNOWN	76	*	71	71	*	*	*	2	3	*	*	*	*	*	*
SOURCE NOT REPORTED	3	*	3	3	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	7,650	1,159	5,940	5,755	180	5	*	105	*	*	54	15	377	*	*
SUPPORT STATUS UNKNOWN	42	*	42	42	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	2,581	582	1,828	1,810	18	*	*	*	*	*	28	*	140	*	3
NOT EMPLOYED	868	*	*	*	*	*	*	*	*	*	*	*	*	868	*
SOCIOLOGISTS/ANTHRO.															
TOTAL	11,909	487	9,285	8,957	298	30	96	534	301	9	203	18	15	911	50
TOTAL SUPPORTED	2,540	99	1,738	1,669	63	6	59	261	301	9	51	*	*	*	22
NASA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NSF	346	*	321	285	36	*	*	3	*	*	*	*	*	*	22
EPA	16	12	4	4	*	*	*	*	*	*	*	*	*	*	*
DOE	32	*	32	32	*	*	*	*	*	*	*	*	*	*	*
NRC	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AID	83	1	64	64	*	*	*	18	*	*	*	*	*	*	*
DHHS, TOTAL	1,044	*	761	761	*	*	6	129	114	9	25	*	*	*	*
NIH	364	*	279	279	*	*	*	77	8	*	*	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	464	*	323	323	*	*	6	74	36	*	25	*	*	*	*
OTHER DHHS	301	*	184	184	*	*	*	13	70	9	25	*	*	*	*
ED, TOTAL	300	82	183	177	*	6	26	9	*	*	*	*	*	*	*
OE	148	82	57	57	*	*	*	9	*	*	*	*	*	*	*
OTHER ED	152	*	126	120	*	6	26	*	*	*	*	*	*	*	*
DOD	67	*	40	40	*	*	27	*	*	*	*	*	*	*	*
COMMERCE	21	*	*	*	*	*	*	21	*	*	*	*	*	*	*
USDA	235	*	232	232	*	*	*	3	*	*	*	*	*	*	*
DOT	40	6	34	34	*	*	*	*	*	*	*	*	*	*	*
JUSTICE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD	2	*	2	2	*	*	*	*	*	*	*	*	*	*	*
INTERIOR	138	*	59	32	27	*	*	*	74	*	5	*	*	*	*
OTHER	507	10	268	232	36	*	*	95	113	*	21	*	*	*	*
SOURCE UNKNOWN	57	*	53	53	*	*	*	4	*	*	*	*	*	*	*
SOURLE NOT REPORTED	23	*	23	23	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED	6,519	255	5,978	5,727	227	24	37	143	*	*	73	18	15	*	*
SUPPORT STATUS UNKNOWN	123	*	113	110	3	*	*	10	*	*	*	*	*	*	*
NO REPORT	1,816	133	1,456	1,451	5	*	*	120	*	*	79	*	*	*	28
NOT EMPLOYED	911	*	*	*	*	*	*	*	*	*	*	*	*	911	*

* NO CASES REPORTED

TABLE B-29. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
OTHER SOCIAL SCIENTISTS															
TOTAL	30,270	2,073	20,950	19,742	749	459	42	1,287	2,303	223	878	444	113	1,748	209
TOTAL SUPPORTED	6,957	552	2,592	2,549	40	3	23	666	2,303	223	316	214	66	*	2
NASA	151	*	40	40	*	*	*	*	71	*	*	*	40	*	*
NSF	782	2	649	649	*	*	*	7	84	*	*	*	40	*	*
EPA	100	9	8	8	*	*	*	*	5	*	31	7	40	*	*
DOE	182	10	96	96	*	*	*	46	30	*	*	*	*	*	*
NRC	39	*	*	*	*	*	*	39	*	*	*	*	*	*	*
AID	394	*	70	70	*	*	*	187	137	*	*	*	*	*	*
DHHS, TOTAL	774	60	148	143	5	*	6	120	244	*	145	11	40	*	*
NIH	159	2	90	90	*	*	*	33	10	*	24	*	*	*	*
ALCOHOL/DRUG ABUSE&MHA	167	38	40	35	5	*	3	*	56	*	28	2	*	*	*
OTHER DHHS	494	22	62	62	*	*	3	87	178	*	93	9	40	*	*
ED, TOTAL	760	63	622	619	3	*	*	14	39	*	22	*	*	*	*
OE	99	*	92	92	*	*	*	7	*	*	*	*	*	*	*
OTHER ED	661	63	530	527	3	*	*	7	39	*	22	*	*	*	*
DOD	675	134	58	58	*	*	*	22	206	223	*	32	*	*	*
COMMERCE	208	*	63	63	*	*	*	25	33	*	*	47	40	*	*
USDA	242	18	48	48	*	*	*	4	168	*	2	*	*	*	2
DOT	221	60	75	75	*	*	*	*	*	*	*	46	40	*	*
JUSTICE	467	113	207	207	*	*	*	71	36	*	29	11	*	*	*
HUD	294	18	88	88	*	*	*	67	82	*	26	13	*	*	*
INTERIOR	431	9	204	204	*	*	*	*	147	*	31	*	40	*	*
OTHER	1,942	170	506	471	32	3	17	90	958	*	83	52	66	*	*
SOURCE UNKNOWN	216	2	114	114	*	*	*	37	63	*	*	*	*	*	*
SOURCE NOT REPORTED	50	*	46	46	*	*	*	4	*	*	*	*	*	*	*
NOT SUPPORTED	16,522	1,046	14,325	13,429	531	365	19	473	*	*	447	171	41	*	*
SUPPORT STATUS UNKNOWN	552	34	446	329	100	17	*	3	*	*	37	32	*	*	*
NO REPORT	4,491	441	3,587	3,435	78	74	*	145	*	*	78	27	6	*	207
NOT EMPLOYED	1,748	*	*	*	*	*	*	*	*	*	*	*	*	1,748	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

BEST COPY AVAILABLE

TABLE B-30. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF NATIONAL INTEREST, AND TYPE OF EMPLOYER: 1981

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
ALL FIELDS															
TOTAL	363,866	99,020	186,809	179,010	5,035	2,764	9,862	12,581	25,087	2,052	4,454	2,068	992	20,328	613
EDUCATION(NOT TEACHING)	19,651	1,758	16,214	13,981	902	1,331	242	666	321	19	287	128	6	*	10
HEALTH	64,522	12,758	37,036	36,406	505	125	6,396	2,983	3,065	587	1,103	535	53	*	6
DEFENSE	17,946	7,362	4,413	4,327	86	*	24	1,197	4,057	893	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	19,979	7,085	8,734	8,478	244	12	98	695	2,543	116	447	261	*	*	*
SPACE	5,283	1,326	2,367	2,358	2	7	*	246	1,315	29	*	*	*	*	*
CRIME PREVENTION/CONTROL	3,991	425	2,225	2,175	25	25	99	161	212	2	552	315	*	*	*
FOOD/OTHER AGR. PRODUCTS	17,047	4,776	8,971	8,861	110	*	6	265	2,661	33	196	39	100	*	*
ENERGY OR FUEL	36,125	17,858	13,798	13,414	281	103	12	1,918	2,178	63	215	56	5	*	22
OTHER NATURAL RESOURCES	8,193	1,510	4,395	4,316	57	22	*	213	1,706	*	346	14	9	*	*
COMMUNITY DEV./SERVICES	7,840	1,061	5,159	4,897	236	26	337	431	252	46	162	240	152	*	*
HOUSING	1,881	676	857	796	61	*	5	100	149	*	26	68	*	*	*
TRANSP/COMMUNICATIONS	7,952	4,961	2,297	2,244	10	43	*	97	471	24	23	55	24	*	*
OTHER	18,020	3,748	10,752	10,267	339	146	51	1,079	1,800	32	236	73	249	*	*
NOT EMPLOYED	20,328	*	*	*	*	*	*	*	*	*	*	*	*	20,328	*
NO REPORT	115,108	33,716	69,591	66,490	2,177	924	2,592	2,530	4,357	208	861	284	394	*	575
PHYSICAL SCIENTISTS															
TOTAL	67,693	27,401	28,333	26,897	1,162	274	518	2,071	4,343	136	258	100	*	4,504	29
EDUCATION(NOT TEACHING)	2,455	142	2,190	2,008	144	38	12	60	27	*	24	*	*	*	*
HEALTH	8,335	3,260	4,036	4,012	24	*	366	316	315	20	14	8	*	*	*
DEFENSE	4,782	1,931	1,190	1,190	*	*	*	346	1,236	79	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	4,723	2,579	1,342	1,316	26	*	22	86	552	3	55	84	*	*	*
SPACE	2,081	315	1,181	1,181	*	*	*	101	484	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	195	*	44	44	*	*	*	40	29	2	72	8	*	*	*
FOOD/OTHER AGR. PRODUCTS	1,885	1,318	327	318	9	*	*	12	204	14	10	*	*	*	*
ENERGY OR FUEL	10,213	4,759	4,405	4,187	184	34	*	466	536	3	44	*	*	*	*
OTHER NATURAL RESOURCES	683	489	116	116	*	*	*	*	78	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	371	77	203	187	16	*	11	36	44	*	*	*	*	*	*
HOUSING	133	29	86	53	33	*	*	18	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	1,216	1,094	67	64	3	*	*	16	37	*	2	*	*	*	*
OTHER	1,624	927	537	534	1	2	*	87	72	*	1	*	*	*	*
NOT EMPLOYED	4,504	*	*	*	*	*	*	*	*	*	*	*	*	4,504	*
NO REPORT	24,493	10,481	12,609	11,687	722	200	107	487	729	15	36	*	*	*	29
CHEMISTS															
TOTAL	45,376	22,250	15,772	14,621	923	228	405	1,033	2,131	65	203	100	*	3,405	12
EDUCATION(NOT TEACHING)	1,426	103	1,302	1,160	104	38	12	9	*	*	*	*	*	*	*
HEALTH	7,711	3,109	3,700	3,676	24	*	294	296	273	17	14	8	*	*	*
DEFENSE	1,581	623	473	473	*	*	*	54	402	29	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	4,220	2,525	1,066	1,040	26	*	*	72	417	3	53	84	*	*	*
SPACE	113	33	33	33	*	*	*	30	17	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	155	*	44	44	*	*	*	*	29	2	72	8	*	*	*
FOOD/OTHER AGR. PRODUCTS	1,884	1,318	327	318	9	*	*	11	204	14	10	*	*	*	*
ENERGY OR FUEL	6,288	3,827	1,896	1,756	106	34	*	278	269	*	18	*	*	*	*
OTHER NATURAL RESOURCES	630	489	63	63	*	*	*	*	78	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	309	77	141	125	16	*	11	36	44	*	*	*	*	*	*
HOUSING	69	29	40	7	33	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	741	682	18	15	3	*	*	2	37	*	2	*	*	*	*
OTHER	1,034	749	239	236	1	2	*	41	4	*	1	*	*	*	*
NOT EMPLOYED	3,405	*	*	*	*	*	*	*	*	*	*	*	*	3,405	*
NO REPORT	15,810	8,686	6,430	5,675	601	154	88	204	357	*	33	*	*	*	12
PHYSICISTS/ASTRONOMERS															
TOTAL	22,317	5,151	12,561	12,276	239	46	113	1,038	2,212	71	55	*	*	1,099	17
EDUCATION(NOT TEACHING)	1,029	39	888	848	40	*	*	51	27	*	24	*	*	*	*
HEALTH	624	151	336	336	*	*	72	20	42	3	*	*	*	*	*
DEFENSE	3,201	1,308	717	717	*	*	*	292	834	50	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	503	54	276	276	*	*	22	14	135	*	2	*	*	*	*
SPACE	1,968	282	1,148	1,148	*	*	*	71	467	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	40	*	*	*	*	*	*	40	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	1	*	*	*	*	*	*	1	*	*	*	*	*	*	*
ENERGY OR FUEL	3,925	932	2,509	2,431	78	*	*	188	267	3	26	*	*	*	*
OTHER NATURAL RESOURCES	53	*	53	53	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	62	*	62	62	*	*	*	*	*	*	*	*	*	*	*
HOUSING	64	*	46	46	*	*	*	18	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	475	412	49	49	*	*	*	14	*	*	*	*	*	*	*
OTHER	590	178	298	298	*	*	*	46	68	*	*	*	*	*	*
NOT EMPLOYED	1,099	*	*	*	*	*	*	*	*	*	*	*	*	1,099	*
NO REPORT	8,683	1,795	6,179	6,012	121	46	19	283	372	15	3	*	*	*	17
MATHEMATICAL SCIENTISTS															
TOTAL	16,470	1,621	12,739	12,294	302	143	*	263	852	57	2	*	14	876	46
EDUCATION(NOT TEACHING)	1,536	84	1,426	1,278	115	33	*	15	2	*	2	*	*	*	7
HEALTH	547	126	348	348	*	*	*	17	56	*	*	*	*	*	*
DEFENSE	1,079	381	414	414	*	*	*	20	207	57	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	331	49	213	213	*	*	*	30	39	*	*	*	*	*	*
SPACE	210	41	140	138	2	*	*	29	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	65	*	48	45	3	*	*	*	17	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	138	36	88	88	*	*	*	*	14	*	*	*	*	*	*
ENERGY OR FUEL	607	162	338	338	*	*	*	32	75	*	*	*	*	*	*
OTHER NATURAL RESOURCES	70	*	46	46	*	*	*	*	24	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	224	6	214	209	5	*	*	4	*	*	*	*	*	*	*
HOUSING	69	13	40	40	*	*	*	*	16	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	330	109	131	131	*	*	*	*	90	*	*	*	*	*	*
OTHER	544	57	431	411	13	7	*	3	53	*	*	*	*	*	*
NOT EMPLOYED	876	*	*	*	*	*	*	*	*	*	*	*	*	876	*
NO REPORT	9,844	557	8,862	8,395	164	103	*	113	259	*	*	*	14	*	39

* NO CASES REPORTED

TABLE B-30. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF NATIONAL INTEREST, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
MATHEMATICIANS															
TOTAL	13,819	1,159	11,007	10,564	300	143	*	224	553	57	2	*	*	781	36
EDUCATION(NOT TEACHING).	1,397	63	1,310	1,162	115	33	*	15	*	*	2	*	*	*	7
HEALTH	210	51	139	139	*	*	*	8	12	*	*	*	*	*	*
DEFENSE	806	297	268	268	*	*	*	19	165	57	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	83	30	51	51	*	*	*	2	*	*	*	*	*	*	*
SPACE	184	36	119	117	2	*	*	29	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	48	*	34	31	3	*	*	*	14	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	53	20	33	33	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL	439	97	258	258	*	*	*	31	53	*	*	*	*	*	*
OTHER NATURAL RESOURCES.	67	*	46	46	*	*	*	*	21	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	162	6	152	147	5	*	*	4	*	*	*	*	*	*	*
HOUSING	39	13	26	26	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	272	74	116	116	*	*	*	*	82	*	*	*	*	*	*
OTHER	334	45	252	232	13	7	*	3	34	*	*	*	*	*	*
NOT EMPLOYED	781	*	*	*	*	*	*	*	*	*	*	*	*	781	*
NO REPORT	8,944	427	8,203	7,938	162	103	*	113	172	*	*	*	*	*	29
STATISTICIANS															
TOTAL	2,651	462	1,732	1,730	2	*	*	39	299	*	*	*	14	95	10
EDUCATION(NOT TEACHING).	139	21	116	116	*	*	*	*	2	*	*	*	*	*	*
HEALTH	337	75	209	209	*	*	*	9	44	*	*	*	*	*	*
DEFENSE	273	84	146	146	*	*	*	1	42	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	248	19	162	162	*	*	*	28	39	*	*	*	*	*	*
SPACE	26	5	21	21	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	17	*	14	14	*	*	*	*	3	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	85	16	55	55	*	*	*	*	14	*	*	*	*	*	*
ENERGY OR FUEL	168	65	80	80	*	*	*	1	22	*	*	*	*	*	*
OTHER NATURAL RESOURCES.	3	*	*	*	*	*	*	*	3	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	62	*	62	62	*	*	*	*	*	*	*	*	*	*	*
HOUSING	30	*	14	14	*	*	*	*	16	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	58	35	15	15	*	*	*	*	8	*	*	*	*	*	*
OTHER	210	12	179	179	*	*	*	*	19	*	*	*	*	*	*
NOT EMPLOYED	95	*	*	*	*	*	*	*	*	*	*	*	*	95	*
NO REPORT	900	130	659	657	2	*	*	*	87	*	*	*	14	*	10
COMPUTER SPECIALISTS															
TOTAL	9,066	5,212	3,010	2,954	49	7	20	276	355	23	48	104	*	18	*
EDUCATION(NOT TEACHING).	612	81	506	496	3	7	*	25	*	*	*	*	*	*	*
HEALTH	310	118	175	175	*	*	*	14	3	*	*	*	*	*	*
DEFENSE	960	516	148	134	14	*	*	137	142	17	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	133	38	54	54	*	*	*	17	*	*	*	24	*	*	*
SPACE	247	115	88	88	*	*	*	*	44	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	94	13	*	*	*	*	*	*	3	*	*	78	*	*	*
FOOD/OTHER AGR. PRODUCTS	23	2	19	19	*	*	*	*	2	*	*	*	*	*	*
ENERGY OR FUEL	625	458	127	127	*	*	*	14	26	*	*	*	*	*	*
OTHER NATURAL RESOURCES.	8	8	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	78	30	48	48	*	*	*	*	*	*	*	*	*	*	*
HOUSING	2	*	*	*	*	*	*	2	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	810	756	18	18	*	*	*	26	6	*	4	*	*	*	*
OTHER	512	274	225	219	6	*	*	*	10	3	*	*	*	*	*
NOT EMPLOYED	18	*	*	*	*	*	*	*	*	*	*	*	*	18	*
NO REPORT	4,634	2,803	1,602	1,576	26	*	20	41	119	3	44	2	*	*	*
ENVIRONMENTAL SCIENTISTS															
TOTAL	16,589	4,788	6,772	6,611	128	33	*	623	3,069	115	562	54	16	560	30
EDUCATION(NOT TEACHING).	300	11	224	185	39	*	*	32	33	*	*	*	*	*	*
HEALTH	55	12	38	38	*	*	*	*	5	*	*	*	*	*	*
DEFENSE	580	170	146	146	*	*	*	*	231	33	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	3,938	1,087	1,388	1,378	1	9	*	201	955	*	288	19	*	*	*
SPACE	641	35	263	263	*	*	*	28	286	29	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	227	23	115	115	*	*	*	*	71	12	6	*	*	*	*
ENERGY OR FUEL	4,275	2,340	1,327	1,300	18	9	*	118	407	*	61	*	*	*	22
OTHER NATURAL RESOURCES.	2,011	327	949	932	17	*	*	74	490	*	155	7	9	*	*
COMMUNITY DEV./SERVICES.	169	21	102	100	2	*	*	13	12	*	9	12	*	*	*
HOUSING	17	17	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	17	9	8	8	*	*	*	*	*	*	*	*	*	*	*
OTHER	444	44	204	195	9	*	*	35	127	27	*	*	7	*	*
NOT EMPLOYED	560	*	*	*	*	*	*	*	*	*	*	*	*	560	*
NO REPORT	3,355	692	2,008	1,951	42	15	*	122	452	14	43	16	*	*	8
EARTH SCIENTISTS															
TOTAL	12,605	4,213	5,019	4,858	128	33	*	309	2,060	23	412	54	7	484	24
EDUCATION(NOT TEACHING).	233	11	176	137	39	*	*	26	20	*	*	*	*	*	*
HEALTH	45	12	28	28	*	*	*	*	5	*	*	*	*	*	*
DEFENSE	204	87	76	76	*	*	*	*	41	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	2,384	814	691	681	1	9	*	138	560	*	162	19	*	*	*
SPACE	435	10	182	182	*	*	*	1	219	23	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	87	11	55	55	*	*	*	*	21	*	*	*	*	*	*
ENERGY OR FUEL	3,954	2,231	1,191	1,164	18	9	*	65	390	*	61	*	*	*	16
OTHER NATURAL RESOURCES.	1,688	321	727	710	17	*	*	26	466	*	141	7	*	*	*
COMMUNITY DEV./SERVICES.	150	21	102	100	2	*	*	*	6	*	9	12	*	*	*
HOUSING	17	17	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	17	9	8	8	*	*	*	*	*	*	*	*	*	*	*
OTHER	225	8	131	122	9	*	*	16	63	*	*	*	7	*	*
NOT EMPLOYED	484	*	*	*	*	*	*	*	*	*	*	*	*	484	*
NO REPORT	2,682	661	1,652	1,595	42	15	*	37	269	*	39	16	*	*	8

* NO CASES REPORTED

TABLE B-30. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF NATIONAL INTEREST, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
OCEANOGRAPHERS															
TOTAL......................	1,818	184	964	964	*	*	*	86	367	29	137	*	9	36	6
EDUCATION(NOT TEACHING).	34	*	29	29	*	*	*	*	5	*	*	*	*	*	*
HEALTH....................	10	*	10	10	*	*	*	*	*	*	*	*	*	*	*
DEFENSE...................	159	28	48	48	*	*	*	*	75	8	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	702	67	373	373	*	*	*	36	111	*	115	*	*	*	*
SPACE.....................	12	12	*	*	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	126	12	60	60	*	*	*	*	48	*	6	*	*	*	*
ENERGY OR FUEL...........	148	50	68	68	*	*	*	7	17	*	*	*	*	*	6
OTHER NATURAL RESOURCES.	163	*	114	114	*	*	*	18	8	*	14	*	9	*	*
COMMUNITY DEV./SERVICES.	*	*	*	*	*	*	*	*	*	*	*		*	*	*
HOUSING...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER.....................	85	15	47	47	*	*	*	5	3	15	*	*	*	*	*
NOT EMPLOYED.............	36	*	*	*	*	*	*	*	*	*	*	*	*	36	*
NO REPORT................	343	*	215	215	*	*	*	20	100	6	2	*	*	*	*
ATMOSPHERIC SCIENTISTS															
TOTAL......................	2,166	391	789	789	*	*	*	228	642	63	13	*	*	40	*
EDUCATION(NOT TEACHING).	33	*	19	19	*	*	*	6	8	*	*	*	*	*	*
HEALTH....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DEFENSE...................	217	55	22	22	*	*	*	*	115	25	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	852	206	324	324	*	*	*	27	284	*	11	*	*	*	*
SPACE.....................	194	13	81	81	*	*	*	27	67	6	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	14	*	*	*	*	*	*	*	2	12	*	*	*	*	*
ENERGY OR FUEL...........	173	59	68	68	*	*	*	46	*	*	*	*	*	*	*
OTHER NATURAL RESOURCES.	160	6	108	108	*	*	*	30	16	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	19	*	*	*	*	*	*	13	6	*	*	*	*	*	*
HOUSING...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER.....................	134	21	26	26	*	*	*	14	61	12	*	*	*	*	*
NOT EMPLOYED.............	40	*	*	*	*	*	*	*	*	*	*	*	*	40	*
NO REPORT................	330	31	141	141	*	*	*	65	83	8	2	*	*	*	*
ENGINEERS															
TOTAL......................	58,311	31,659	18,083	18,018	35	30	18	2,338	3,805	504	135	222	160	1,358	29
EDUCATION(NOT TEACHING).	1,294	287	950	950	*	*	*	51	3	3	*	*	*	*	*
HEALTH....................	2,109	595	1,206	1,206	*	*	11	134	143	20	*	*	*	*	*
DEFENSE...................	7,908	3,913	1,607	1,607	*	*	*	664	1,359	365	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	3,761	2,142	1,185	1,185	*	*	7	80	152	58	62	75	*	*	*
SPACE.....................	1,852	820	544	544	*	*	*	88	400	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	126	82	44	44	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	666	351	271	271	*	*	*	*	44	*	*	*	*	*	*
ENERGY OR FUEL...........	15,392	9,167	4,513	4,510	3	*	*	943	644	22	45	56	2	*	*
OTHER NATURAL RESOURCES.	1,095	498	479	477	2	*	*	16	78	*	24	*	*	*	*
COMMUNITY DEV./SERVICES.	502	219	156	156	*	*	*	*	16	12	*	*	99	*	*
HOUSING...................	736	355	304	304	*	*	*	11	66	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	3,729	2,542	809	809	*	*	*	55	232	24	4	39	24	*	*
OTHER.....................	2,117	1,163	791	791	*	*	*	73	90	*	*	*	*	*	*
NOT EMPLOYED.............	1,358	*	*	*	*	*	*	*	*	*	*	*	*	1,358	*
NO REPORT................	15,666	9,525	5,224	5,164	30	30	*	223	578	*	*	52	35	*	29
AERO/ASTRO ENGINEERS															
TOTAL......................	2,536	1,126	675	675	*	*	*	176	425	116	*	*	*	18	*
EDUCATION(NOT TEACHING).	14	13	1	1	*	*	*	*	*	*	*	*	*	*	*
HEALTH....................	18	18	*	*	*	*	*	*	*	*	*	*	*	*	*
DEFENSE...................	807	351	101	101	*	*	*	124	115	116	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SPACE.....................	696	199	303	303	*	*	*	52	142	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL...........	376	254	122	122	*	*	*	*	*	*	*	*	*	*	*
OTHER NATURAL RESOURCES.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOUSING...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	219	116	16	16	*	*	*	*	87	*	*	*	*	*	*
OTHER.....................	2	*	*	*	*	*	*	*	2	*	*	*	*	*	*
NOT EMPLOYED.............	18	*	*	*	*	*	*	*	*	*	*	*	*	18	*
NO REPORT................	386	175	132	132	*	*	*	*	79	*	*	*	*	*	*
CHEMICAL ENGINEERS															
TOTAL......................	7,612	5,342	1,380	1,380	*	*	*	143	258	*	23	*	*	466	*
EDUCATION(NOT TEACHING).	129	44	85	85	*	*	*	*	*	*	*	*	*	*	*
HEALTH....................	75	46	29	29	*	*	*	*	*	*	*	*	*	*	*
DEFENSE...................	122	43	63	63	*	*	*	*	16	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	811	627	165	165	*	*	*	*	19	*	*	*	*	*	*
SPACE.....................	65	*	41	41	*	*	*	*	24	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	23	23	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	170	170	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL...........	3,683	2,811	554	554	*	*	*	142	153	*	23	*	*	*	*
OTHER NATURAL RESOURCES.	136	58	78	78	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	16	16	*	*	*	*	*	*	*	*	*	*	*	*	*
HOUSING...................	94	94	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	43	43	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER.....................	175	175	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED.............	466	*	*	*	*	*	*	*	*	*	*	*	*	466	*
NO REPORT................	1,604	1,192	365	365	*	*	*	1	46	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-30. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF NATIONAL INTEREST, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL									
CIVIL ENGINEERS															
TOTAL	6,032	2,468	2,789	2,786	3	*	7	69	147	131	88	104	99	126	4
EDUCATION(NOT TEACHING)	172	*	172	172	*	*	*	*	*	*	*	*	*	*	*
HEALTH	5	*	*	*	*	*	*	*	5	*	*	*	*	*	*
DEFENSE	236	2	123	123	*	*	*	*	38	73	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	1,978	986	790	790	*	*	7	*	16	58	60	61	*	*	*
SPACE	7	*	*	*	*	*	*	*	7	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL	858	520	254	254	*	*	*	69	15	*	*	*	*	*	*
OTHER NATURAL RESOURCES	262	145	86	86	*	*	*	*	7	*	24	*	*	*	*
COMMUNITY DEV./SERVICES	174	43	32	32	*	*	*	*	*	*	*	*	99	*	*
HOUSING	235	115	120	120	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	512	150	296	296	*	*	*	*	54	*	4	8	*	*	*
OTHER	155	52	98	98	*	*	*	*	5	*	*	*	*	*	*
NOT EMPLOYED	126	*	*	*	*	*	*	*	*	*	*	*	*	126	*
NO REPORT	1,312	455	818	815	3	*	*	*	*	*	*	35	*	*	4
ELEC./ELECTRON. ENGINEERS															
TOTAL	10,834	6,189	3,630	3,630	*	*	*	264	524	3	*	60	*	164	*
EDUCATION(NOT TEACHING)	291	50	238	238	*	*	*	*	*	3	*	*	*	*	*
HEALTH	274	48	223	223	*	*	*	2	1	*	*	*	*	*	*
DEFENSE	2,701	1,664	556	556	*	*	*	138	343	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	77	27	16	16	*	*	*	20	*	*	*	14	*	*	*
SPACE	496	322	97	97	*	*	*	1	76	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	18	18	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	25	25	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL	1,345	566	732	732	*	*	*	47	*	*	*	*	*	*	*
OTHER NATURAL RESOURCES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	55	17	38	38	*	*	*	*	*	*	*	*	*	*	*
HOUSING	55	24	*	*	*	*	*	*	31	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	1,152	789	265	265	*	*	*	53	16	*	*	29	*	*	*
OTHER	336	193	143	143	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	164	*	*	*	*	*	*	*	*	*	*	*	*	164	*
NO REPORT	3,845	2,446	1,322	1,322	*	*	*	3	57	*	*	17	*	*	*
MATERIALS SCI. ENGINEERS															
TOTAL	6,238	4,067	1,496	1,496	*	*	*	178	388	*	*	*	*	109	*
EDUCATION(NOT TEACHING)	134	*	134	134	*	*	*	*	*	*	*	*	*	*	*
HEALTH	123	63	60	60	*	*	*	*	*	*	*	*	*	*	*
DEFENSE	574	306	86	86	*	*	*	64	118	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	256	256	*	*	*	*	*	*	*	*	*	*	*	*	*
SPACE	87	61	2	2	*	*	*	*	24	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL	1,696	1,159	455	455	*	*	*	33	49	*	*	*	*	*	*
OTHER NATURAL RESOURCES	372	155	165	165	*	*	*	16	36	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	179	141	38	38	*	*	*	*	*	*	*	*	*	*	*
HOUSING	93	47	35	35	*	*	*	11	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	493	413	36	36	*	*	*	*	44	*	*	*	*	*	*
OTHER	305	241	47	47	*	*	*	17	*	*	*	*	*	*	*
NOT EMPLOYED	109	*	*	*	*	*	*	*	*	*	*	*	*	109	*
NO REPORT	1,817	1,225	438	438	*	*	*	37	117	*	*	*	*	*	*
MECHANICAL ENGINEERS															
TOTAL	5,577	2,645	2,139	2,136	3	*	*	263	322	*	*	2	*	206	*
EDUCATION(NOT TEACHING)	89	24	30	30	*	*	*	35	*	*	*	*	*	*	*
HEALTH	89	46	43	43	*	*	*	*	*	*	*	*	*	*	*
DEFENSE	576	206	255	255	*	*	*	*	115	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	132	44	88	88	*	*	*	*	*	*	*	*	*	*	*
SPACE	145	91	38	38	*	*	*	*	16	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	50	50	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL	1,966	855	808	805	3	*	*	191	112	*	*	*	*	*	*
OTHER NATURAL RESOURCES	54	54	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	32	*	32	32	*	*	*	*	*	*	*	*	*	*	*
HOUSING	35	*	*	*	*	*	*	*	35	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	227	132	93	93	*	*	*	*	*	*	*	2	*	*	*
OTHER	270	114	156	156	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	206	*	*	*	*	*	*	*	*	*	*	*	*	206	*
NO REPORT	1,706	1,029	596	596	*	*	*	37	44	*	*	*	*	*	*
NUCLEAR ENGINEERS															
TOTAL	2,061	1,057	634	634	*	*	*	242	72	*	*	56	*	*	*
EDUCATION(NOT TEACHING)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HEALTH	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DEFENSE	242	119	93	93	*	*	*	8	22	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	71	*	35	35	*	*	*	36	*	*	*	*	*	*	*
SPACE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL	1,419	793	374	374	*	*	*	146	50	*	*	56	*	*	*
OTHER NATURAL RESOURCES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOUSING	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	23	22	1	1	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	306	123	131	131	*	*	*	52	*	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE B-30. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF NATIONAL INTEREST, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS												
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
SYSTEMS DESIGN ENGINEERS															
TOTAL......................	5,366	2,993	992	992	*	*	*	525	702	89	24	*	24	17	*
EDUCATION(NOT TEACHING).	113	96	14	14	*	*	*	*	3	*	*	*	*	*	*
HEALTH..................	44	36	8	8	*	*	*	*	*	*	*	*	*	*	*
DEFENSE.................	1,747	829	160	160	*	*	*	299	382	77	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	30	23	*	*	*	*	*	2	3	*	2	*	*	*	*
SPACE...................	183	62	*	*	*	*	*	33	88	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	44	*	44	44	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	60	60	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL..........	747	283	264	264	*	*	*	114	64	*	22	*	*	*	*
OTHER NATURAL RESOURCES.	11	*	*	*	*	*	*	*	11	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	15	*	3	3	*	*	*	*	*	12	*	*	*	*	*
HOUSING.................	75	75	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	615	533	43	43	*	*	*	2	13	*	*	*	24	*	*
OTHER...................	141	55	86	86	*	*	*	*	*	*	*	*	*	*	*
NOT EMPLOYED............	17	*	*	*	*	*	*	*	*	*	*	*	*	17	*
NO REPORT...............	1,524	941	370	370	*	*	*	75	138	*	*	*	*	*	*
OTHER ENGINEERS															
TOTAL......................	12,055	5,772	4,348	4,289	29	30	11	478	967	165	*	*	37	252	25
EDUCATION(NOT TEACHING).	352	60	276	276	*	*	*	16	*	*	*	*	*	*	*
HEALTH..................	1,481	338	843	843	*	*	11	132	137	20	*	*	*	*	*
DEFENSE.................	903	393	170	170	*	*	*	31	210	99	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	406	179	91	91	*	*	*	22	114	*	*	*	*	*	*
SPACE...................	173	85	63	63	*	*	*	2	23	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	41	41	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	361	46	271	271	*	*	*	*	44	*	*	*	*	*	*
ENERGY OR FUEL..........	3,302	1,926	950	950	*	*	*	201	201	22	*	*	2	*	*
OTHER NATURAL RESOURCES.	260	86	150	148	2	*	*	*	24	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	31	2	13	13	*	*	*	*	16	*	*	*	*	*	*
HOUSING.................	149	*	149	149	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	468	366	60	60	*	*	*	*	18	24	*	*	*	*	*
OTHER...................	710	311	260	260	*	*	*	56	83	*	*	*	*	*	*
NOT EMPLOYED............	252	*	*	*	*	*	*	*	*	*	*	*	*	252	*
NO REPORT...............	3,166	1,939	1,052	995	27	30	*	18	97	*	*	*	35	*	25
LIFE SCIENTISTS															
TOTAL......................	93,848	13,473	56,787	55,528	1,127	132	2,974	3,165	7,590	764	1,265	378	152	7,133	167
EDUCATION(NOT TEACHING).	2,289	125	1,952	1,847	91	14	21	87	69	16	15	4	*	*	*
HEALTH..................	35,643	5,130	23,390	23,110	277	3	2,131	1,623	2,018	487	597	213	48	*	6
DEFENSE.................	341	21	26	26	*	*	13	6	182	93	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	5,494	958	3,347	3,192	155	*	45	257	738	55	42	52	*	*	*
SPACE...................	99	*	71	64	*	7	*	*	28	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	84	11	56	56	*	*	*	*	10	*	7	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	13,050	2,970	7,506	7,418	88	*	6	224	2,125	7	173	39	*	*	*
ENERGY OR FUEL..........	1,588	307	932	927	*	5	*	155	154	38	2	*	*	*	*
OTHER NATURAL RESOURCES.	3,489	150	2,063	2,003	38	22	*	112	1,007	*	150	7	*	*	*
COMMUNITY DEV./SERVICES.	646	100	418	392	23	3	15	15	*	*	32	28	38	*	*
HOUSING.................	109	44	62	62	*	*	*	3	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	73	16	27	20	7	*	*	*	20	*	10	*	*	*	*
OTHER...................	1,667	159	1,263	1,201	62	*	12	100	69	2	9	7	46	*	*
NOT EMPLOYED............	7,133	*	*	*	*	*	*	*	*	*	*	*	*	7,133	*
NO REPORT...............	22,143	3,482	15,674	15,210	386	78	731	583	1,170	66	228	28	20	*	161
BIOLOGICAL SCIENTISTS															
TOTAL......................	54,442	5,330	35,840	34,828	909	103	1,181	2,272	4,156	200	481	88	34	4,769	91
EDUCATION(NOT TEACHING).	1,501	64	1,283	1,225	44	14	14	67	53	16	*	4	*	*	*
HEALTH..................	21,212	2,237	15,130	14,882	245	3	914	1,167	1,357	81	240	48	34	*	4
DEFENSE.................	247	14	19	19	*	*	*	6	168	40	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	3,677	534	2,423	2,275	148	*	36	205	448	6	9	16	*	*	*
SPACE...................	36	*	21	14	*	7	*	*	15	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	45	*	28	28	*	*	*	*	10	*	7	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	4,264	833	2,424	2,372	52	*	3	85	855	7	57	*	*	*	*
ENERGY OR FUEL..........	870	141	541	536	*	5	*	130	51	7	*	*	*	*	*
OTHER NATURAL RESOURCES.	1,488	92	931	893	38	*	*	88	343	*	27	7	*	*	*
COMMUNITY DEV./SERVICES.	316	30	234	226	5	3	7	6	*	*	32	7	*	*	*
HOUSING.................	26	26	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	27	*	20	13	7	*	*	*	7	*	*	*	*	*	*
OTHER...................	1,134	42	976	969	7	*	12	51	46	*	7	*	*	*	*
NOT EMPLOYED............	4,769	*	*	*	*	*	*	*	*	*	*	*	*	4,769	*
NO REPORT...............	14,830	1,317	11,810	11,376	363	71	195	467	803	43	102	6	*	*	87
AGRICULTURAL SCIENTISTS															
TOTAL......................	17,270	3,450	9,147	8,974	151	22	3	284	2,435	9	393	39	84	1,391	35
EDUCATION(NOT TEACHING).	455	20	391	354	37	*	*	18	11	*	15	*	*	*	*
HEALTH..................	100	26	22	22	*	*	*	33	19	*	*	*	*	*	*
DEFENSE.................	7	*	*	*	*	*	*	*	*	7	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	954	219	461	461	*	*	*	22	219	*	33	*	*	*	*
SPACE...................	12	*	12	12	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	27	11	16	16	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	8,418	2,090	4,833	4,797	36	*	3	137	1,200	*	116	39	*	*	*
ENERGY OR FUEL..........	565	119	348	348	*	*	*	*	96	*	2	*	*	*	*
OTHER NATURAL RESOURCES.	1,982	58	1,113	1,091	*	22	*	24	664	*	123	*	*	*	*
COMMUNITY DEV./SERVICES.	206	33	135	117	18	*	*	*	*	*	*	*	38	*	*
HOUSING.................	83	18	62	62	*	*	*	3	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	12	2	*	*	*	*	*	*	*	*	10	*	*	*	*
OTHER...................	323	85	170	121	49	*	*	12	10	*	*	*	46	*	*
NOT EMPLOYED............	1,391	*	*	*	*	*	*	*	*	*	*	*	*	1,391	*
NO REPORT...............	2,735	769	1,584	1,573	11	*	*	35	216	2	94	*	*	*	35

* NO CASES REPORTED

TABLE B-30. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF NATIONAL INTEREST, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EMPLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
MEDICAL SCIENTISTS															
TOTAL	22,136	4,693	11,800	11,726	67	7	1,790	609	999	555	391	251	36	973	41
EDUCATION(NOT TEACHING)	333	41	278	268	10	*	7	2	5	*	*	*	*	*	*
HEALTH	14,331	2,867	8,238	8,206	32	*	1,217	423	642	406	357	165	14	*	2
DEFENSE	87	7	7	7	*	*	13	*	14	46	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	863	205	463	456	7	*	9	30	71	49	*	36	*	*	*
SPACE	51	*	38	38	*	*	*	*	13	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	12	*	12	12	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	368	47	249	249	*	*	*	2	70	*	*	*	*	*	*
ENERGY OR FUEL	153	47	43	43	*	*	*	25	7	31	*	*	*	*	*
OTHER NATURAL RESOURCES	19	*	19	19	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	124	37	49	49	*	*	8	9	*	*	*	21	*	*	*
HOUSING	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	34	14	7	7	*	*	*	*	13	*	*	*	*	*	*
OTHER	210	32	117	111	6	*	*	37	13	2	2	7	*	*	*
NOT EMPLOYED	973	*	*	*	*	*	*	*	*	*	*	*	*	973	*
NO REPORT	4,578	1,396	2,280	2,261	12	7	536	81	151	21	32	22	20	*	39
PSYCHOLOGISTS															
TOTAL	45,416	10,145	21,833	19,195	987	1,651	6,194	1,693	1,211	221	982	733	5	2,352	47
EDUCATION(NOT TEACHING)	5,699	741	4,391	3,177	204	1,010	209	169	25	*	112	52	*	*	*
HEALTH	14,711	3,410	5,908	5,618	168	122	3,753	673	327	51	290	294	5	*	*
DEFENSE	902	234	172	150	22	*	11	2	387	96	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	244	18	180	180	*	*	24	*	22	*	*	*	*	*	*
SPACE	48	*	46	46	*	*	*	*	2	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	1,157	155	505	470	10	25	99	50	5	*	249	94	*	*	*
FOOD/OTHER AGR. PRODUCTS	136	56	38	38	*	*	*	20	22	*	*	*	*	*	*
ENERGY OR FUEL	528	154	269	244	9	16	12	52	41	*	*	*	*	*	*
OTHER NATURAL RESOURCES	3	*	3	3	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	2,241	411	1,121	1,017	81	23	308	209	21	34	46	91	*	*	*
HOUSING	155	29	83	83	*	*	5	4	*	*	*	34	*	*	*
TRANSP/COMMUNICATIONS	224	186	38	38	*	*	*	*	*	*	*	*	*	*	*
OTHER	1,824	586	1,072	973	21	78	39	26	69	*	13	19	*	*	*
NOT EMPLOYED	2,352	*	*	*	*	*	*	*	*	*	*	*	*	2,352	*
NO REPORT	15,192	4,165	8,007	7,158	472	377	1,734	488	290	40	272	149	*	*	47
SOCIAL SCIENTISTS															
TOTAL	56,473	4,721	39,252	37,513	1,245	494	138	2,152	3,862	232	1,202	477	645	3,527	265
EDUCATION(NOT TEACHING)	5,466	287	4,575	4,040	306	229	*	227	162	*	134	72	6	*	3
HEALTH	2,812	107	1,935	1,899	36	*	135	206	198	9	202	20	*	*	*
DEFENSE	1,394	196	710	660	50	*	*	22	313	133	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	1,355	214	1,025	960	62	3	*	24	85	*	*	7	*	*	*
SPACE	105	*	34	34	*	*	*	*	71	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	2,270	164	1,526	1,516	12	*	*	71	148	*	224	135	*	*	*
FOOD/OTHER AGR. PRODUCTS	922	20	607	594	13	*	*	9	179	*	7	*	100	*	*
ENERGY OR FUEL	2,897	511	1,887	1,781	67	39	*	138	295	*	63	*	3	*	*
OTHER NATURAL RESOURCES	834	38	739	739	*	*	*	11	29	*	17	*	*	*	*
COMMUNITY DEV./SERVICES	3,609	197	2,897	2,788	109	*	3	154	159	*	75	109	15	*	*
HOUSING	660	189	282	254	28	*	*	62	67	*	26	34	*	*	*
TRANSP/COMMUNICATIONS	1,553	249	1,199	1,156	*	43	*	*	86	*	3	16	*	*	*
OTHER	9,288	538	6,229	5,943	227	59	*	755	1,310	*	213	47	196	*	*
NOT EMPLOYED	3,527	*	*	*	*	*	*	*	*	*	*	*	*	3,527	*
NO REPORT	19,781	2,011	15,605	15,149	335	121	*	473	760	70	238	37	325	*	262
ECONOMISTS															
TOTAL	14,296	2,161	9,017	8,814	198	5	*	331	1,258	*	121	15	517	868	6
EDUCATION(NOT TEACHING)	721	28	652	647	*	5	*	34	*	*	*	*	4	*	3
HEALTH	246	23	193	193	*	*	*	10	20	*	*	*	*	*	*
DEFENSE	215	50	102	102	*	*	*	*	63	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	541	165	325	265	60	*	*	12	39	*	*	*	*	*	*
SPACE	2	*	2	2	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	29	4	11	9	2	*	*	*	14	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	323	11	73	60	13	*	*	9	130	*	*	*	100	*	*
ENERGY OR FUEL	1,189	318	598	591	7	*	*	91	150	*	29	*	3	*	*
OTHER NATURAL RESOURCES	298	32	255	255	*	*	*	11	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	360	56	271	271	*	*	*	2	31	*	*	*	*	*	*
HOUSING	244	94	141	113	28	*	*	2	7	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	448	139	240	240	*	*	*	*	69	*	*	*	*	*	*
OTHER	2,731	369	1,452	1,409	43	*	*	141	520	*	64	15	170	*	*
NOT EMPLOYED	868	*	*	*	*	*	*	*	*	*	*	*	*	868	*
NO REPORT	6,079	872	4,702	4,657	45	*	*	19	215	*	28	*	240	*	3
SOCIOLOGISTS/ANTHRO.															
TOTAL	11,909	487	9,285	8,957	298	30	96	534	301	9	203	18	15	911	50
EDUCATION(NOT TEACHING)	1,236	118	1,003	895	81	27	*	92	*	*	5	18	*	*	*
HEALTH	1,413	67	1,056	1,030	26	*	96	82	67	9	56	*	*	*	*
DEFENSE	35	*	35	35	*	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	142	12	127	124	*	3	*	3	*	*	*	*	*	*	*
SPACE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	737	18	692	692	*	*	*	*	*	*	27	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	157	9	148	148	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL	311	1	263	263	*	*	*	*	46	*	21	*	*	*	*
OTHER NATURAL RESOURCES	114	*	86	86	*	*	*	*	28	*	*	*	*	*	*
COMMUNITY DEV./SERVICES	1,056	4	959	880	79	*	*	78	*	*	*	*	15	*	*
HOUSING	94	35	38	38	*	*	*	21	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	77	9	68	68	*	*	*	*	*	*	*	*	*	*	*
OTHER	1,798	37	1,550	1,531	19	*	*	120	89	*	2	*	*	*	*
NOT EMPLOYED	911	*	*	*	*	*	*	*	*	*	*	*	*	911	*
NO REPORT	3,828	197	3,280	3,187	93	*	*	138	71	*	92	*	*	*	50

* NO CASES REPORTED

TABLE B-30. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF NATIONAL INTEREST, AND TYPE OF EMPLOYER: 1981
CONTINUED

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	BUS-INESS/ INDUS-TRY	EDUCATIONAL INSTITUTIONS				HOS-PITAL/ CLINIC	NON-PROFIT ORGS	FED-ERAL GOV'T	MILI-TARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NOT EM-PLOYED	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL									
OTHER SOCIAL SCIENTISTS															
TOTAL......................	30,270	2,073	20,950	19,742	749	459	42	1,287	2,303	223	878	444	113	1,748	209
EDUCATION(NOT TEACHING).	3,509	141	2,920	2,498	225	197	*	101	162	*	129	54	2	*	*
HEALTH....................	1,153	37	686	676	10	*	39	114	111	*	146	20	*	*	*
DEFENSE...................	1,144	146	573	523	50	*	*	22	250	153	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	672	37	573	571	2	*	*	9	46	*	*	7	*	*	*
SPACE.....................	103	*	32	32	*	*	*	*	71	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	1,504	142	825	815	10	*	*	71	134	*	197	135	*	*	*
FOOD/OTHER AGR. PRODUCTS	442	*	386	386	*	*	*	*	49	*	7	*	*	*	*
ENERGY OR FUEL...........	1,397	192	1,046	947	60	39	*	47	99	*	13	*	*	*	*
OTHER NATURAL RESOURCES.	422	6	398	398	*	*	*	*	1	*	17	*	*	*	*
COMMUNITY DEV./SERVICES.	2,193	137	1,667	1,637	30	*	3	74	128	*	75	109	*	*	*
HOUSING..................	322	60	103	103	*	*	*	39	60	*	26	34	*	*	*
TRANSP/COMMUNICATIONS...	1,028	101	891	848	*	43	*	*	17	*	3	16	*	*	*
OTHER.....................	4,759	132	3,227	3,003	165	59	*	494	701	*	147	32	26	*	*
NOT EMPLOYED.............	1,748	*	*	*	*	*	*	*	*	*	*	*	*	1,748	*
NO REPORT................	9,874	942	7,623	7,305	197	121	*	316	474	70	118	37	85	*	209

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-31. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF NATIONAL INTEREST, AND PRIMARY WORK ACTIVITY: 1981

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
ALL FIELDS														
TOTAL	363,866	120,108	55,265	46,475	18,368	60,312	32,649	27,663	104,956	12,035	25,724	16,441	20,328	3,962
EDUCATION(NOT TEACHING)	19,651	2,217	1,176	779	262	6,386	551	5,835	7,566	537	1,851	821	*	273
HEALTH	64,522	27,561	20,274	5,942	1,345	8,629	4,494	4,135	13,766	1,302	10,223	2,634	*	407
DEFENSE	17,946	9,134	1,910	4,747	2,477	4,829	3,792	1,037	2,104	691	421	756	*	11
ENVIRONMENTAL/POLLUTION	19,979	7,246	2,749	3,703	796	3,773	2,422	1,351	5,120	1,463	718	1,530	*	127
SPACE	5,283	3,249	1,715	771	763	832	706	126	929	90	49	127	*	7
CRIME PREVENTION/CONTROL	3,991	590	129	344	117	492	185	307	1,766	218	566	339	*	20
FOOD/OTHER AGR. PRODUCTS	17,047	8,379	2,834	5,163	382	3,151	1,986	1,165	3,145	522	506	1,070	*	274
ENERGY OR FUEL	36,125	16,438	4,291	8,579	3,568	7,560	5,367	2,193	7,104	2,213	842	1,718	*	250
OTHER NATURAL RESOURCES	8,193	3,313	1,231	1,867	215	1,287	894	393	2,699	287	95	458	*	54
COMMUNITY DEV./SERVICES	7,840	847	160	477	210	1,631	492	1,139	3,714	205	950	438	*	55
HOUSING	1,881	403	29	160	214	362	222	140	628	138	183	142	*	25
TRANSP/COMMUNICATIONS	7,952	3,935	487	1,833	1,615	1,464	1,034	430	1,745	394	106	293	*	15
OTHER	18,020	4,895	2,179	2,131	585	2,598	1,160	1,438	7,343	860	760	1,405	*	159
NOT EMPLOYED	20,328	*	*	*	*	*	*	*	*	*	*	*	20,328	*
NO REPORT	115,108	31,899	16,101	9,979	5,819	17,318	9,344	7,974	47,327	3,115	8,454	4,710	*	2,285
PHYSICAL SCIENTISTS														
TOTAL	67,693	29,681	13,876	12,725	3,080	11,892	8,710	3,182	15,609	1,128	1,446	2,865	4,504	568
EDUCATION(NOT TEACHING)	2,455	292	195	35	62	720	40	680	1,245	2	45	105	*	46
HEALTH	8,335	4,286	2,764	1,226	296	1,374	1,081	293	1,661	231	253	513	*	17
DEFENSE	4,782	3,111	938	1,879	294	1,009	860	149	325	130	39	168	*	*
ENVIRONMENTAL/POLLUTION	4,723	2,062	633	1,125	304	948	721	227	843	69	155	646	*	*
SPACE	2,081	1,478	1,095	320	63	308	287	21	246	20	*	27	*	2
CRIME PREVENTION/CONTROL	195	2	2	*	*	30	*	30	42	*	42	79	*	*
FOOD/OTHER AGR. PRODUCTS	1,885	1,075	345	685	45	473	374	99	195	7	52	73	*	10
ENERGY OR FUEL	10,213	5,395	2,324	2,705	366	1,852	1,494	358	1,949	271	251	445	*	50
OTHER NATURAL RESOURCES	683	470	154	224	92	113	113	*	70	*	30	*	*	*
COMMUNITY DEV./SERVICES	371	15	*	4	11	121	81	40	199	*	36	*	*	*
HOUSING	133	7	7	*	*	80	47	33	46	*	*	*	*	*
TRANSP/COMMUNICATIONS	1,216	892	126	600	166	256	240	16	30	*	34	4	*	*
OTHER	1,624	786	335	354	97	227	172	55	269	142	50	150	*	*
NOT EMPLOYED	4,504	*	*	*	*	*	*	*	*	*	*	*	4,504	*
NO REPORT	24,493	9,810	4,958	3,568	1,284	4,381	3,200	1,181	8,489	256	459	655	*	443
CHEMISTS														
TOTAL	45,176	18,548	8,087	8,376	2,085	8,985	6,855	2,130	9,661	876	1,181	2,329	3,405	391
EDUCATION(NOT TEACHING)	1,426	228	145	21	62	323	12	311	756	*	45	28	*	46
HEALTH	7,711	3,973	2,707	1,020	246	1,286	1,033	253	1,544	230	180	481	*	17
DEFENSE	1,581	844	413	331	50	417	352	65	148	72	*	100	*	*
ENVIRONMENTAL/POLLUTION	4,220	1,896	552	1,066	278	876	703	173	683	47	155	563	*	*
SPACE	113	72	26	34	12	32	32	*	9	*	*	*	*	*
CRIME PREVENTION/CONTROL	155	2	2	*	*	30	*	30	42	*	2	79	*	*
FOOD/OTHER AGR. PRODUCTS	1,884	1,075	345	685	45	473	374	99	195	7	51	73	*	10
ENERGY OR FUEL	6,288	3,115	1,195	1,694	226	1,375	1,143	232	985	218	209	350	*	36
OTHER NATURAL RESOURCES	630	455	139	224	92	113	113	*	32	*	30	*	*	*
COMMUNITY DEV./SERVICES	309	15	*	4	11	119	81	38	139	*	36	*	*	*
HOUSING	69	7	7	*	*	62	29	33	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	741	470	60	248	162	232	216	16	3	*	32	4	*	*
OTHER	1,034	400	131	222	47	163	146	17	173	139	50	109	*	*
NOT EMPLOYED	3,405	*	*	*	*	*	*	*	*	*	*	*	3,405	*
NO REPORT	15,810	5,996	2,365	2,777	854	3,484	2,621	863	4,952	163	391	542	*	282
PHYSICISTS/ASTRONOMERS														
TOTAL	22,317	11,133	5,789	4,349	995	2,907	1,855	1,052	5,948	252	265	536	1,099	177
EDUCATION(NOT TEACHING)	1,029	64	50	14	*	397	28	369	489	2	*	77	*	*
HEALTH	624	313	57	206	50	88	48	40	117	1	73	32	*	*
DEFENSE	3,201	2,267	525	1,498	244	592	508	84	177	58	39	68	*	*
ENVIRONMENTAL/POLLUTION	503	166	81	59	26	72	18	54	160	22	*	83	*	*
SPACE	1,968	1,406	1,069	286	51	276	255	21	237	20	*	27	*	2
CRIME PREVENTION/CONTROL	40	*	*	*	*	*	*	*	*	*	40	*	*	*
FOOD/OTHER AGR. PRODUCTS	1	*	*	*	*	*	*	*	*	*	1	*	*	*
ENERGY OR FUEL	3,925	2,280	1,129	1,011	140	477	351	126	964	53	42	95	*	14
OTHER NATURAL RESOURCES	53	15	15	*	*	*	*	*	38	*	*	*	*	*
COMMUNITY DEV./SERVICES	62	*	*	*	*	2	*	2	60	*	*	*	*	*
HOUSING	64	*	*	*	*	18	18	*	46	*	*	*	*	*
TRANSP/COMMUNICATIONS	475	422	66	352	4	24	24	*	27	*	2	*	*	*
OTHER	590	386	204	132	50	64	26	38	96	3	*	41	*	*
NOT EMPLOYED	1,099	*	*	*	*	*	*	*	*	*	*	*	1,099	*
NO REPORT	8,683	3,814	2,593	791	430	897	579	318	3,537	93	68	113	*	161
MATHEMATICAL SCIENTISTS														
TOTAL	16,470	3,390	1,756	1,239	395	1,316	284	1,032	9,602	458	301	383	876	144
EDUCATION(NOT TEACHING)	1,536	119	100	4	15	459	18	441	837	61	47	28	*	5
HEALTH	547	143	31	70	42	12	7	5	279	88	25	*	*	*
DEFENSE	1,079	584	83	389	112	125	98	27	213	95	8	54	*	*
ENVIRONMENTAL/POLLUTION	331	69	3	66	*	2	*	2	195	33	17	15	*	*
SPACE	210	97	35	62	*	1	1	*	90	14	*	3	*	5
CRIME PREVENTION/CONTROL	65	*	*	*	*	*	*	*	48	3	*	14	*	*
FOOD/OTHER AGR. PRODUCTS	138	46	15	11	20	27	19	8	65	*	*	*	*	*
ENERGY OR FUEL	607	280	82	173	25	45	23	22	195	46	22	19	*	*
OTHER NATURAL RESOURCES	70	16	*	16	*	27	14	13	22	3	*	2	*	*
COMMUNITY DEV./SERVICES	224	*	*	*	*	16	*	16	204	2	2	*	*	*
HOUSING	69	14	*	14	*	12	*	12	28	2	*	13	*	*
TRANSP/COMMUNICATIONS	330	142	2	58	82	45	15	30	114	28	*	1	*	*
OTHER	544	147	74	59	14	28	28	*	336	5	*	26	*	2
NOT EMPLOYED	876	*	*	*	*	*	*	*	*	*	*	*	876	*
NO REPORT	9,844	1,733	1,331	317	85	517	61	456	6,976	98	180	208	*	132

* NO CASES REPORTED

TABLE B-31. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF
CONTINUED NATIONAL INTEREST, AND PRIMARY WORK ACTIVITY: 1981

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	RESEARCH AND DEVELOPMENT TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	MANAGEMENT OR ADMIN TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
MATHEMATICIANS														
TOTAL......................	13,819	2,731	1,631	761	339	1,147	213	934	8,277	161	223	378	781	121
EDUCATION(NOT TEACHING).	1,397	115	100	*	15	387	18	369	803	12	47	28	*	5
HEALTH..................	210	82	16	24	42	5	*	5	121	2	*	*	*	*
DEFENSE.................	806	403	68	243	92	101	74	27	182	58	8	54	*	*
ENVIRONMENTAL/POLLUTION.	83	18	3	15	*	2	*	2	48	*	*	15	*	*
SPACE...................	184	90	28	62	*	1	1	*	76	14	*	3	*	*
CRIME PREVENTION/CONTROL	48	*	*	*	*	*	*	*	34	*	*	14	*	*
FOOD/OTHER AGR. PRODUCTS	53	20	*	*	20	8	*	8	25	*	*	*	*	*
ENERGY OR FUEL..........	439	208	82	109	17	35	23	12	164	13	*	19	*	*
OTHER NATURAL RESOURCES.	67	16	*	16	*	27	14	13	22	*	*	2	*	*
COMMUNITY DEV./SERVICES.	162	*	*	*	*	16	*	16	142	2	2	*	*	*
HOUSING.................	39	*	*	*	*	12	*	12	14	*	*	13	*	*
TRANSP/COMMUNICATIONS...	272	102	2	32	68	45	15	30	99	25	*	1	*	*
OTHER...................	334	103	67	22	14	19	19	*	181	3	*	26	*	2
NOT EMPLOYED............	781	*	*	*	*	*	*	*	*	*	*	*	781	*
NO REPORT...............	8,944	1,574	1,265	238	71	489	49	440	6,366	32	166	203	*	114
STATISTICIANS														
TOTAL......................	2,651	659	125	478	56	169	71	98	1,325	297	78	5	95	23
EDUCATION(NOT TEACHING).	139	4	*	4	*	72	*	72	36	29	*	*	*	*
HEALTH..................	337	61	15	46	*	7	7	*	158	86	25	*	*	*
DEFENSE.................	273	181	15	146	20	24	24	*	31	37	*	*	*	*
ENVIRONMENTAL/POLLUTION.	248	51	*	51	*	*	*	*	147	33	17	*	*	*
SPACE...................	26	7	7	*	*	*	*	*	14	*	*	*	*	5
CRIME PREVENTION/CONTROL	17	*	*	*	*	*	*	*	14	3	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	85	26	15	11	*	19	19	*	40	*	*	*	*	*
ENERGY OR FUEL..........	168	72	*	64	8	10	*	10	31	33	22	*	*	*
OTHER NATURAL RESOURCES.	3	*	*	*	*	*	*	*	*	3	*	*	*	*
COMMUNITY DEV./SERVICES.	62	*	*	*	*	*	*	*	62	*	*	*	*	*
HOUSING.................	30	14	*	14	*	*	*	*	14	2	*	*	*	*
TRANSP/COMMUNICATIONS...	58	40	*	26	14	*	*	*	15	3	*	*	*	*
OTHER...................	210	44	7	37	*	9	9	*	155	2	*	*	*	*
NOT EMPLOYED............	95	*	*	*	*	*	*	*	*	*	*	*	95	*
NO REPORT...............	900	159	66	79	14	28	12	16	610	66	14	5	*	18
COMPUTER SPECIALISTS														
TOTAL......................	9,066	4,512	620	884	3,008	1,693	808	885	1,546	554	217	424	18	102
EDUCATION(NOT TEACHING).	612	149	16	98	35	169	12	157	213	30	24	27	*	*
HEALTH..................	310	160	30	26	104	118	44	74	21	*	*	11	*	*
DEFENSE.................	960	516	78	50	388	161	138	23	74	66	71	72	*	*
ENVIRONMENTAL/POLLUTION.	133	105	38	31	36	20	*	20	5	*	*	3	*	*
SPACE...................	247	110	*	32	78	90	44	46	47	*	*	*	*	*
CRIME PREVENTION/CONTROL	94	78	*	*	78	16	13	3	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	23	11	*	2	9	10	*	10	2	*	*	*	*	*
ENERGY OR FUEL..........	625	391	8	39	344	135	45	90	44	52	3	*	*	*
OTHER NATURAL RESOURCES.	8	5	*	*	5	*	*	*	*	*	*	3	*	*
COMMUNITY DEV./SERVICES.	78	26	*	*	26	25	25	*	22	5	*	*	*	*
HOUSING.................	2	*	*	*	*	*	*	*	*	*	*	2	*	*
TRANSP/COMMUNICATIONS...	810	485	34	157	294	180	100	80	6	85	*	54	*	*
OTHER...................	512	217	69	39	109	82	35	47	99	72	4	38	*	*
NOT EMPLOYED............	18	*	*	*	*	*	*	*	*	*	*	*	18	*
NO REPORT...............	4,634	2,259	347	410	1,502	687	352	335	1,013	244	115	214	*	102
ENVIRONMENTAL SCIENTISTS														
TOTAL......................	16,589	6,321	3,306	2,729	286	3,624	2,410	1,214	3,617	1,045	395	882	560	145
EDUCATION(NOT TEACHING).	300	54	54	*	*	84	18	66	87	*	42	24	*	9
HEALTH..................	55	17	17	*	*	12	10	2	12	*	*	14	*	*
DEFENSE.................	580	318	151	159	8	124	123	1	50	71	2	15	*	*
ENVIRONMENTAL/POLLUTION.	3,938	1,275	709	558	8	1,303	879	424	619	358	179	204	*	*
SPACE...................	641	469	376	84	9	60	60	*	106	6	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	227	137	59	49	29	75	47	28	7	1	*	*	*	7
ENERGY OR FUEL..........	4,275	1,902	649	1,070	183	964	604	360	721	300	75	290	*	23
OTHER NATURAL RESOURCES.	2,011	650	347	286	17	330	249	81	682	110	7	191	*	41
COMMUNITY DEV./SERVICES.	169	40	19	9	12	*	*	*	100	12	*	17	*	*
HOUSING.................	17	*	*	*	*	*	*	*	*	*	9	8	*	*
TRANSP/COMMUNICATIONS...	17	*	*	*	*	9	9	*	8	*	*	*	*	*
OTHER...................	444	213	173	40	*	59	26	33	106	14	14	38	*	*
NOT EMPLOYED............	560	*	*	*	*	*	*	*	*	*	*	*	560	*
NO REPORT...............	3,355	1,246	752	474	20	604	385	219	1,119	173	67	81	*	65
EARTH SCIENTISTS														
TOTAL......................	12,605	4,076	1,755	2,067	254	2,719	1,680	1,039	3,101	927	373	803	484	120
EDUCATION(NOT TEACHING).	233	36	36	*	*	54	9	45	69	*	42	23	*	9
HEALTH..................	45	17	17	*	*	4	2	2	12	*	*	12	*	*
DEFENSE.................	204	67	38	23	6	42	42	*	32	57	*	6	*	*
ENVIRONMENTAL/POLLUTION.	2,384	503	116	385	2	801	500	301	433	281	167	199	*	*
SPACE...................	435	285	239	37	9	55	55	*	95	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	87	58	41	*	17	21	8	13	7	1	*	*	*	*
ENERGY OR FUEL..........	3,954	1,675	532	960	183	924	564	360	679	295	74	284	*	23
OTHER NATURAL RESOURCES.	1,688	472	203	252	17	300	219	81	579	110	7	179	*	41
COMMUNITY DEV./SERVICES.	150	27	6	9	12	*	*	*	100	12	*	11	*	*
HOUSING.................	17	*	*	*	*	*	*	*	*	*	9	8	*	*
TRANSP/COMMUNICATIONS...	17	*	*	*	*	9	9	*	8	*	*	*	*	*
OTHER...................	225	82	65	17	*	34	10	24	93	7	7	2	*	*
NOT EMPLOYED............	484	*	*	*	*	*	*	*	*	*	*	*	484	*
NO REPORT...............	2,682	854	462	384	8	475	262	213	994	164	67	81	*	47

* NO CASES REPORTED

TABLE B-31. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF
CONTINUED NATIONAL INTEREST, AND PRIMARY WORK ACTIVITY: 1987

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER						
OCEANOGRAPHERS														
TOTAL........................	1,818	1,028	792	224	12	445	345	100	182	53	20	36	36	18
EDUCATION(NOT TEACHING).	34	*	*	*	*	22	1	21	11	*	*	1	*	*
HEALTH..................	10	*	*	*	*	8	8	*	*	*	*	2	*	*
DEFENSE.................	159	110	103	7	*	28	28	*	*	14	*	7	*	*
ENVIRONMENTAL/POLLUTION.	702	352	266	86	*	221	145	76	90	27	12	*	*	*
SPACE...................	12	12	12	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	126	77	18	47	12	42	39	3	*	*	*	*	*	7
ENERGY OR FUEL..........	148	115	82	33	*	18	18	*	3	5	1	6	*	*
OTHER NATURAL RESOURCES.	163	132	99	33	*	9	9	*	10	*	*	12	*	*
COMMUNITY DEV./SERVICES.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOUSING.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER...................	85	41	40	1	*	16	16	*	6	7	7	8	*	*
NOT EMPLOYED............	36	*	*	*	*	*	*	*	*	*	*	*	36	*
NO REPORT...............	343	189	172	17	*	81	81	*	62	*	*	*	*	11
ATMOSPHERIC SCIENTISTS														
TOTAL........................	2,166	1,217	759	438	20	460	385	75	334	65	2	41	40	7
EDUCATION(NOT TEACHING).	33	18	18	*	*	8	8	*	7	*	*	*	*	*
HEALTH..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DEFENSE.................	217	141	10	129	2	54	53	1	18	*	2	2	*	*
ENVIRONMENTAL/POLLUTION.	852	420	327	87	6	281	234	47	96	50	*	5	*	*
SPACE...................	194	172	125	47	*	5	5	*	11	6	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	14	2	*	2	*	12	*	12	*	*	*	*	*	*
ENERGY OR FUEL..........	173	112	35	77	*	22	22	*	39	*	*	*	*	*
OTHER NATURAL RESOURCES.	160	46	45	1	*	21	21	*	93	*	*	*	*	*
COMMUNITY DEV./SERVICES.	19	13	13	*	*	*	*	*	*	*	*	6	*	*
HOUSING.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER...................	134	90	68	22	*	9	*	9	7	*		28	*	*
NOT EMPLOYED............	40	*	*	*	*	*	*	*	*	*	*	*	40	*
NO REPORT...............	330	203	118	73	12	48	42	6	63	9	*	*	*	7
ENGINEERS														
TOTAL........................	58,311	23,380	2,777	10,730	9,873	15,193	10,302	4,891	10,744	3,818	1,366	2,282	1,358	170
EDUCATION(NOT TEACHING).	1,294	155	20	72	63	654	99	555	308	92	81	4	*	*
HEALTH..................	2,109	980	459	270	251	400	174	226	467	135	77	50	*	*
DEFENSE.................	7,908	3,850	534	1,752	1,564	2,754	2,253	501	667	201	116	309	*	11
ENVIRONMENTAL/POLLUTION.	3,761	1,384	164	847	373	586	337	249	815	587	140	249	*	*
SPACE...................	1,852	1,013	167	233	613	353	314	39	374	50	36	26	*	*
CRIME PREVENTION/CONTROL	126	39	*	*	39	83	23	60	*	4	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	666	255	2	179	74	185	114	71	90	73	*	63	*	*
ENERGY OR FUEL..........	15,392	6,898	558	3,720	2,620	3,859	2,717	1,142	2,459	1,254	358	506	*	58
OTHER NATURAL RESOURCES.	1,095	337	36	257	44	322	246	76	207	166	11	52	*	*
COMMUNITY DEV./SERVICES.	502	140	*	*	140	260	63	197	57	13	16	16	*	*
HOUSING.................	736	192	*	70	122	116	116	*	248	136	44	*	*	*
TRANSP/COMMUNICATIONS...	3,729	1,995	212	783	1,000	697	521	176	740	143	46	108	*	*
OTHER...................	2,117	716	112	256	348	487	276	211	477	166	84	186	*	1
NOT EMPLOYED............	1,358	*	*	*	*	*	*	*	*	*	*	*	1,358	*
NO REPORT...............	15,666	5,426	533	2,291	2,602	4,437	3,049	1,388	3,835	798	357	713	*	100
AERO/ASTRO ENGINEERS														
TOTAL........................	2,536	1,076	175	588	313	838	620	218	387	40	84	50	18	43
EDUCATION(NOT TEACHING).	14	1	1	*	*	13	13	*	*	*	*	*	*	*
HEALTH..................	18	*	*	*	*	18	18	*	*	*	*	*	*	*
DEFENSE.................	807	361	46	265	50	446	399	47	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SPACE...................	696	299	50	81	168	83	83	*	228	40	36	10	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL..........	376	171	35	102	34	95	*	95	62	*	48	*	*	*
OTHER NATURAL RESOURCES.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOUSING.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	219	203	43	99	61	*	*	*	16	*	*	*	*	*
OTHER...................	2	*	*	*	*	2	2	*	*	*	*	*	*	*
NOT EMPLOYED............	18	*	*	*	*	*	*	*	*	*	*	*	18	*
NO REPORT...............	386	41	*	41	*	181	105	76	81	*	*	40	*	43
CHEMICAL ENGINEERS														
TOTAL........................	7,612	3,605	278	1,847	1,480	1,624	1,192	432	963	387	212	355	466	*
EDUCATION(NOT TEACHING).	129	*	*	*	*	33	*	33	52	*	44	*	*	*
HEALTH..................	75	48	4	16	28	2	2	*	25	*	*	*	*	*
DEFENSE.................	122	68	*	68	*	16	16	*	38	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	811	330	3	253	74	93	93	*	165	158	4	61	*	*
SPACE...................	65	41	41	*	*	24	24	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	23	*	*	*	*	23	23	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	170	73	*	2	71	80	80	*	*	*	*	17	*	*
ENERGY OR FUEL..........	3,683	1,900	131	990	779	987	685	302	388	197	14	197	*	*
OTHER NATURAL RESOURCES.	136	76	*	76	*	58	58	*	2	*	*	*	*	*
COMMUNITY DEV./SERVICES.	16	*	*	*	*	*	*	*	*	*	16	*	*	*
HOUSING.................	94	50	*	*	50	*	*	*	*	*	44	*	*	*
TRANSP/COMMUNICATIONS...	43	43	41	2	*	*	*	*	*	*	*	*	*	*
OTHER...................	175	134	*	*	134	18	18	*	*	*	23	*	*	*
NOT EMPLOYED............	466	*	*	*	*	*	*	*	*	*	*	*	466	*
NO REPORT...............	1,604	842	58	440	344	290	193	97	293	32	67	80	*	*

* NO CASES REPORTED

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TABLE B-31. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF
CONTINUED NATIONAL INTEREST, AND PRIMARY WORK ACTIVITY: 1981

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN								
FIELD AND AREA OF NATIONAL INTEREST	TOTAL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
CIVIL ENGINEERS														
TOTAL....................	6,032	1,220	134	572	514	1,167	443	724	2,066	983	185	262	126	23
EDUCATION(NOT TEACHING).	172	*	*	*	*	96	*	98	74	*	*	*	*	*
HEALTH.................	5	*	*	*	*	5	*	5	*	*	*	*	*	*
DEFENSE................	236	34	9	25	*	64	41	23	136	2	*	*	*	*
ENVIRONMENTAL/POLLUTION.	1,978	556	96	267	193	346	127	219	436	429	58	155	*	*
SPACE..................	7	7	7	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL.........	858	319	*	82	237	118	102	16	208	201	*	9	*	3
OTHER NATURAL RESOURCES.	262	23	*	23	*	24	24	*	63	116	*	36	*	*
COMMUNITY DEV./SERVICES.	174	43	*	*	43	99	*	99	32	*	*	*	*	*
HOUSING................	235	16	*	*	16	14	14	*	106	101	*	*	*	*
TRANSP/COMMUNICATIONS...	512	67	*	63	4	54	46	8	274	68	46	3	*	*
OTHER..................	155	45	24	5	16	35	*	35	39	*	*	36	*	*
NOT EMPLOYED...........	126	*	*	*	*	*	*	*	*	*	*	*	126	*
NO REPORT..............	1,312	114	*	107	7	310	89	221	698	66	81	23	*	20
ELEC./ELECTRON. ENGINEERS														
TOTAL....................	10,834	4,405	273	1,703	2,429	2,999	2,163	836	2,316	377	242	314	164	17
EDUCATION(NOT TEACHING).	291	5	3	2	*	174	35	139	108	*	*	4	*	*
HEALTH.................	274	90	2	39	49	35	35	*	149	*	*	*	*	*
DEFENSE................	2,701	1,472	138	676	658	862	699	163	202	66	16	83	*	*
ENVIRONMENTAL/POLLUTION.	77	44	*	20	24	*	*	*	16	*	*	17	*	*
SPACE..................	496	330	8	3	319	85	68	17	81	*	*	*	*	*
CRIME PREVENTION/CONTROL	18	16	*	*	16	*	*	*	*	2	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	25	*	*	*	*	25	*	25	*	*	*	*	*	*
ENERGY OR FUEL.........	1,345	390	24	193	173	216	192	24	510	54	158	*	*	17
OTHER NATURAL RESOURCES.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	55	*	*	*	*	52	17	35	3	*	*	*	*	*
HOUSING................	55	*	*	*	*	55	55	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	1,152	648	*	273	375	215	117	98	228	61	*	*	*	*
OTHER..................	336	105	1	16	88	146	101	45	83	*	*	2	*	*
NOT EMPLOYED...........	164	*	*	*	*	*	*	*	*	*	*	*	164	*
NO REPORT..............	3,865	1,305	97	481	727	1,134	844	290	936	194	68	208	*	*
MATERIALS SCI. ENGINEERS														
TOTAL....................	6,238	3,035	633	1,665	737	1,652	1,206	446	820	260	96	266	109	*
EDUCATION(NOT TEACHING).	134	16	16	*	*	83	*	83	35	*	*	*	*	*
HEALTH.................	123	1	*	1	*	20	20	*	59	*	*	43	*	*
DEFENSE................	574	320	133	187	*	197	136	61	16	1	*	40	*	*
ENVIRONMENTAL/POLLUTION.	256	128	*	92	36	78	78	*	*	*	34	16	*	*
SPACE..................	87	34	23	11	*	51	51	*	2	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL.........	1,696	920	189	493	238	498	336	162	204	52	*	17	*	*
OTHER NATURAL RESOURCES.	372	107	36	69	2	74	58	16	141	50	*	*	*	*
COMMUNITY DEV./SERVICES.	179	97	*	*	97	79	44	35	3	*	*	*	*	*
HOUSING................	93	46	*	35	11	47	47	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	493	333	87	89	157	83	53	30	33	*	*	44	*	*
OTHER..................	305	174	*	137	37	*	*	*	47	47	*	37	*	*
NOT EMPLOYED...........	109	*	*	*	*	*	*	*	*	*	*	*	109	*
NO REPORT..............	1,817	859	149	551	159	442	383	59	275	110	62	69	*	*
MECHANICAL ENGINEERS														
TOTAL....................	5,577	2,234	344	875	1,015	1,039	660	379	1,502	378	132	86	206	*
EDUCATION(NOT TEACHING).	89	24	*	24	*	51	*	51	14	*	*	*	*	*
HEALTH.................	89	46	*	*	46	*	*	*	43	*	*	*	*	*
DEFENSE................	576	251	123	14	114	175	131	44	147	*	*	3	*	*
ENVIRONMENTAL/POLLUTION.	132	7	*	7	*	*	*	*	81	*	44	*	*	*
SPACE..................	145	129	38	22	69	16	16	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	50	*	*	*	*	34	34	*	*	16	*	*	*	*
ENERGY OR FUEL.........	1,966	954	59	601	294	285	168	117	464	175	88	*	*	*
OTHER NATURAL RESOURCES.	54	24	*	*	24	30	30	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	32	*	*	*	*	16	*	16	16	*	*	*	*	*
HOUSING................	35	35	*	35	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	227	108	*	58	50	29	29	*	90	*	*	*	*	*
OTHER..................	270	45	*	*	45	25	25	*	156	44	*	*	*	*
NOT EMPLOYED...........	206	*	*	*	*	*	*	*	*	*	*	*	206	*
NO REPORT..............	1,706	611	124	114	373	378	227	151	491	143	*	83	*	*
NUCLEAR ENGINEERS														
TOTAL....................	2,061	914	*	502	412	671	545	126	154	183	16	123	*	*
EDUCATION(NOT TEACHING).	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HEALTH.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DEFENSE................	242	173	*	83	90	46	22	24	23	*	*	*	*	*
ENVIRONMENTAL/POLLUTION.	71	*	*	*	*	36	36	*	35	*	*	*	*	*
SPACE..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENERGY OR FUEL.........	1,419	630	*	387	243	454	352	102	49	181	16	109	*	*
OTHER NATURAL RESOURCES.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMUNITY DEV./SERVICES.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HOUSING................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER..................	23	1	*	1	*	*	*	*	*	22	*	*	*	*
NOT EMPLOYED...........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	306	110	*	31	79	135	135	*	47	*	*	16	*	*

* NO CASES REPORTED

TABLE B-31. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF
CONTINUED NATIONAL INTEREST, AND PRIMARY WORK ACTIVITY: 1981

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
SYSTEMS DESIGN ENGINEERS														
TOTAL	5,366	2,436	127	653	1,656	1,535	1,131	434	567	467	143	190	17	11
EDUCATION(NOT TEACHING)	113	23	*	3	20	14	*	14	*	76	*	*	*	*
HEALTH	44	39	*	4	35	*	*	*	4	1	*	*	*	*
DEFENSE	1,747	847	38	234	575	632	539	93	23	96	71	67	*	11
ENVIRONMENTAL/POLLUTION	30	27	23	2	2	3	3	*	*	*	*	*	*	*
SPACE	183	102	*	47	55	71	49	22	*	10	*	*	*	*
CRIME PREVENTION/CONTROL	44	*	*	*	*	44	*	44	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	60	3	*	*	3	*	*	*	*	57	*	*	*	*
ENERGY OR FUEL	747	322	*	179	143	175	94	81	168	65	*	17	*	*
OTHER NATURAL RESOURCES	11	*	*	*	*	*	*	*	*	*	11	*	*	*
COMMUNITY DEV./SERVICES	15	*	*	*	*	12	*	12	3	*	*	*	*	*
HOUSING	75	40	*	*	40	*	*	*	*	35	*	*	*	*
TRANSP/COMMUNICATIONS	615	407	*	103	304	121	108	13	39	2	*	46	*	*
OTHER	141	26	*	24	2	44	16	28	46	*	*	25	*	*
NOT EMPLOYED	17	*	*	*	*	*	*	*	*	*	*	*	17	*
NO REPORT	1,524	600	66	57	477	419	292	127	284	125	61	35	*	*
OTHER ENGINEERS														
TOTAL	12,055	4,455	813	2,325	1,317	3,668	2,372	1,296	1,969	743	256	636	252	76
EDUCATION(NOT TEACHING)	352	86	*	43	43	188	51	137	25	16	37	*	*	*
HEALTH	1,481	756	453	210	93	320	99	221	187	134	77	7	*	*
DEFENSE	903	324	27	200	97	316	270	46	82	36	29	116	*	*
ENVIRONMENTAL/POLLUTION	406	294	44	206	44	30	*	30	82	*	*	*	*	*
SPACE	173	71	*	69	2	23	23	*	63	*	*	16	*	*
CRIME PREVENTION/CONTROL	41	23	*	*	23	16	*	16	*	2	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	361	179	2	177	*	46	*	46	90	*	*	46	*	*
ENERGY OR FUEL	3,302	1,292	120	693	479	1,031	788	243	401	349	34	157	*	38
OTHER NATURAL RESOURCES	260	107	*	89	18	136	76	60	1	*	*	16	*	*
COMMUNITY DEV./SERVICES	31	*	*	*	*	2	2	*	*	13	*	16	*	*
HOUSING	169	7	*	*	7	*	*	*	162	*	*	*	*	*
TRANSP/COMMUNICATIONS	468	186	41	96	49	195	168	27	60	12	*	15	*	*
OTHER	710	186	87	73	26	217	114	103	106	53	61	86	*	1
NOT EMPLOYED	252	*	*	*	*	*	*	*	*	*	*	*	252	*
NO REPORT	3,166	944	39	469	436	1,148	781	367	730	128	18	161	*	37
LIFE SCIENTISTS														
TOTAL	93,848	39,888	27,314	11,497	1,077	12,457	6,807	5,650	21,990	1,623	5,297	4,225	7,133	1,235
EDUCATION(NOT TEACHING)	2,289	364	286	64	14	821	95	726	785	23	152	110	*	34
HEALTH	35,643	19,536	15,608	3,382	546	4,653	2,663	1,990	6,696	427	2,745	1,362	*	224
DEFENSE	361	159	80	72	7	113	112	1	20	*	29	20	*	*
ENVIRONMENTAL/POLLUTION	5,494	1,974	1,004	895	75	797	471	326	1,788	346	191	308	*	90
SPACE	99	67	29	38	*	12	*	12	7	*	13	*	*	*
CRIME PREVENTION/CONTROL	84	22	9	13	*	14	7	7	37	*	*	*	*	11
FOOD/OTHER AGR. PRODUCTS	13,050	6,527	2,343	3,988	196	2,180	1,390	790	2,357	439	441	849	*	257
ENERGY OR FUEL	1,588	833	413	400	20	264	176	88	297	43	14	83	*	54
OTHER NATURAL RESOURCES	3,489	1,604	534	1,013	57	462	243	219	1,257	8	45	113	*	*
COMMUNITY DEV./SERVICES	646	139	49	81	9	174	77	97	225	19	47	42	*	*
HOUSING	109	24	*	24	*	*	*	*	34	*	7	37	*	7
TRANSP/COMMUNICATIONS	73	23	16	7	*	20	13	7	7	7	9	7	*	*
OTHER	1,667	661	543	118	*	170	53	117	578	13	57	188	*	*
NOT EMPLOYED	7,133	*	*	*	*	*	*	*	*	*	*	*	7,133	*
NO REPORT	22,143	7,955	6,400	1,402	153	2,777	1,507	1,270	7,902	298	1,547	1,106	*	558
BIOLOGICAL SCIENTISTS														
TOTAL	56,442	25,647	21,332	3,853	462	5,036	2,786	2,250	15,217	751	948	1,450	4,769	624
EDUCATION(NOT TEACHING)	1,501	274	239	21	14	374	18	356	652	6	110	55	*	30
HEALTH	21,212	14,007	12,276	1,505	226	1,928	1,287	641	4,095	195	482	411	*	94
DEFENSE	247	133	74	52	7	80	80	*	14	*	*	20	*	*
ENVIRONMENTAL/POLLUTION	3,677	1,247	806	372	69	460	285	175	1,508	200	84	105	*	73
SPACE	36	29	29	*	*	*	*	*	7	*	*	*	*	*
CRIME PREVENTION/CONTROL	45	3	3	*	*	14	7	7	28	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	4,264	2,493	1,400	1,031	62	390	268	122	936	177	45	164	*	59
ENERGY OR FUEL	870	496	350	146	*	103	71	32	193	18	*	20	*	40
OTHER NATURAL RESOURCES	1,488	628	378	210	40	136	78	58	682	8	7	27	*	*
COMMUNITY DEV./SERVICES	316	64	44	20	*	93	13	80	132	7	7	13	*	*
HOUSING	26	*	*	*	*	*	*	*	*	*	7	19	*	*
TRANSP/COMMUNICATIONS	27	13	6	7	*	*	*	*	7	7	*	*	*	*
OTHER	1,134	493	444	49	*	132	33	99	431	13	19	46	*	*
NOT EMPLOYED	4,769	*	*	*	*	*	*	*	*	*	*	*	4,769	*
NO REPORT	14,830	5,767	5,283	440	44	1,326	646	680	6,532	120	187	570	*	328
AGRICULTURAL SCIENTISTS														
TOTAL	17,270	6,732	1,556	4,975	201	3,348	1,924	1,424	2,997	407	715	1,342	1,391	338
EDUCATION(NOT TEACHING)	455	47	12	35	*	259	37	222	89	*	34	22	*	4
HEALTH	100	34	15	12	7	35	28	7	7	*	*	24	*	*
DEFENSE	7	*	*	*	*	7	7	*	*	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	954	424	48	376	*	161	113	48	159	50	43	106	*	11
SPACE	12	*	*	*	*	12	*	12	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	27	7	*	7	*	*	*	*	9	*	*	*	*	11
FOOD/OTHER AGR. PRODUCTS	8,418	3,891	922	2,852	117	1,726	1,093	633	1,328	262	389	630	*	192
ENERGY OR FUEL	565	275	37	220	18	125	82	43	70	19	14	55	*	7
OTHER NATURAL RESOURCES	1,982	969	149	803	17	326	165	161	563	*	38	86	*	*
COMMUNITY DEV./SERVICES	206	61	*	61	*	49	49	*	59	12	11	14	*	*
HOUSING	83	24	*	24	*	*	*	*	34	*	*	18	*	7
TRANSP/COMMUNICATIONS	12	10	10	*	*	*	*	*	*	*	2	*	*	*
OTHER	323	70	12	58	*	7	7	*	106	*	18	122	*	*
NOT EMPLOYED	1,391	*	*	*	*	*	*	*	*	*	*	*	1,391	*
NO REPORT	2,735	920	351	527	42	641	343	298	573	64	166	265	*	106

* NO CASES REPORTED

TABLE B-31. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF
CONTINUED NATIONAL INTEREST, AND PRIMARY WORK ACTIVITY: 1981

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NOT EMPLOYED	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER						
MEDICAL SCIENTISTS														
TOTAL	22,136	7,509	4,426	2,669	414	4,073	2,097	1,976	3,776	465	3,634	1.433	973	273
EDUCATION(NOT TEACHING)	333	43	35	8	*	188	40	148	44	17	8	33	*	*
HEALTH	14,331	5,495	3,317	1,865	313	2,690	1,348	1,342	2,594	232	2,263	927	*	130
DEFENSE	87	26	6	20	*	26	25	1	6	*	29	*	*	*
ENVIRONMENTAL/POLLUTION	863	303	150	147	6	176	73	103	121	96	64	97	*	6
SPACE	51	38	*	38	*	*	*	*	*	*	13	*	*	*
CRIME PREVENTION/CONTROL	12	12	6	6	*	*	*	*	*	*	*	*	*	*
FOOD/OTHER AGR. PRODUCTS	368	143	21	105	17	64	29	35	93	*	7	55	*	6
ENERGY OR FUEL	153	62	26	34	2	36	23	13	34	6	*	8	*	7
OTHER NATURAL RESOURCES	19	7	7	*	*	*	*	*	12	*	*	*	*	*
COMMUNITY DEV./SERVICES	124	14	5	*	9	32	15	17	34	*	29	15	*	*
HOUSING	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TRANSP/COMMUNICATIONS	34	*	*	*	*	20	13	7	*	*	7	7	*	*
OTHER	210	98	87	11	*	31	13	18	41	*	20	20	*	*
NOT EMPLOYED	973	*	*	*	*	*	*	*	*	*	*	*	973	*
NO REPORT	4,578	1,266	766	435	67	810	518	292	797	114	1,194	271	*	124
PSYCHOLOGISTS														
TOTAL	45,416	5,383	2,461	2,518	404	5,853	1,062	4,791	12,563	2,051	15,168	1,512	2,352	534
EDUCATION(NOT TEACHING)	5,699	694	333	313	48	1,439	103	1,336	1,737	225	1,337	168	*	99
HEALTH	14,711	1,898	1,080	715	103	1,510	338	1,172	3,214	389	6,969	569	*	162
DEFENSE	902	412	41	287	84	225	183	42	110	13	138	4	*	*
ENVIRONMENTAL/POLLUTION	244	94	72	22	*	*	*	*	152	*	18	*	*	*
SPACE	48	15	13	2	*	8	*	8	25	*	*	*	*	*
CRIME PREVENTION/CONTROL	1,157	162	36	126	*	52	*	52	256	175	426	77	*	9
FOOD/OTHER AGR. PRODUCTS	136	68	*	59	9	42	*	42	13	*	13	*	*	*
ENERGY OR FUEL	528	113	57	56	*	101	47	54	127	92	69	22	*	4
OTHER NATURAL RESOURCES	3	*	*	*	*	*	*	*	3	*	*	*	*	*
COMMUNITY DEV./SERVICES	2,241	47	24	23	*	363	35	328	865	130	719	117	*	*
HOUSING	155	11	4	5	2	5	*	5	43	*	93	3	*	*
TRANSP/COMMUNICATIONS	224	110	*	74	36	2	*	2	38	36	*	38	*	*
OTHER	1,824	178	6	155	17	235	70	165	777	188	359	74	*	13
NOT EMPLOYED	2,352	*	*	*	*	*	*	*	*	*	*	*	2,352	*
NO REPORT	15,192	1,581	795	681	105	1,871	286	1,585	5,223	803	5,027	440	*	247
SOCIAL SCIENTISTS														
TOTAL	56,473	7,553	3,155	4,153	245	8,284	2,266	6,018	29,285	1,358	1,534	3,868	3,527	1,064
EDUCATION(NOT TEACHING)	5,466	390	172	193	25	2,040	166	1,874	2,354	124	123	355	*	80
HEALTH	2,812	541	285	253	3	550	177	373	1,416	32	154	115	*	4
DEFENSE	1,394	184	25	159	*	318	25	293	645	115	18	114	*	*
ENVIRONMENTAL/POLLUTION	1,355	285	126	159	*	117	14	103	723	70	18	105	*	37
SPACE	105	*	*	*	*	*	*	*	34	*	*	71	*	*
CRIME PREVENTION/CONTROL	2,270	287	82	205	*	297	142	155	1,383	36	98	169	*	*
FOOD/OTHER AGR. PRODUCTS	922	260	70	190	*	159	42	117	416	2	*	85	*	*
ENERGY OR FUEL	2,897	626	200	416	10	340	261	79	1,312	155	50	353	*	61
OTHER NATURAL RESOURCES	834	231	160	71	*	33	29	4	458	*	2	97	*	13
COMMUNITY DEV./SERVICES	3,609	440	68	360	12	672	211	461	2,042	24	130	246	*	55
HOUSING	660	155	18	47	90	149	59	90	229	*	30	79	*	18
TRANSP/COMMUNICATIONS	1,553	288	97	154	37	255	136	119	802	95	17	81	*	15
OTHER	9,288	1,977	867	1,110	*	1,310	500	810	4,701	260	192	705	*	143
NOT EMPLOYED	3,527	*	*	*	*	*	*	*	*	*	*	*	3,527	*
NO REPORT	19,781	1,889	985	836	68	2,044	504	1,540	12,770	445	702	1,293	*	636
ECONOMISTS														
TOTAL	14,294	2,972	778	2,171	23	1,815	628	1,187	6,769	615	283	787	868	185
EDUCATION(NOT TEACHING)	721	84	21	63	*	153	3	150	355	28	32	23	*	46
HEALTH	246	27	*	27	*	12	12	*	180	23	*	4	*	*
DEFENSE	215	32	*	32	*	88	*	88	46	5	18	26	*	*
ENVIRONMENTAL/POLLUTION	541	134	28	106	*	*	*	*	266	60	18	63	*	*
SPACE	2	*	*	*	*	*	*	*	2	*	*	*	*	*
CRIME PREVENTION/CONTROL	29	*	*	*	*	*	*	*	11	4	*	14	*	*
FOOD/OTHER AGR. PRODUCTS	323	164	*	164	*	49	3	46	41	*	*	69	*	*
ENERGY OR FUEL	1,189	359	46	308	5	193	136	57	475	94	18	50	*	*
OTHER NATURAL RESOURCES	298	159	136	23	*	18	18	*	76	*	*	32	*	13
COMMUNITY DEV./SERVICES	360	92	*	92	*	88	3	85	132	*	17	31	*	*
HOUSING	244	62	15	47	*	38	38	*	98	*	28	*	*	18
TRANSP/COMMUNICATIONS	448	201	64	135	2	17	*	17	159	56	*	*	*	15
OTHER	2,731	918	181	737	*	418	192	226	1,086	140	12	140	*	17
NOT EMPLOYED	868	*	*	*	*	*	*	*	*	*	*	*	868	*
NO REPORT	6,079	740	287	437	16	741	223	518	3,842	205	140	335	*	76
SOCIOLOGISTS/ANTHRO.														
TOTAL	11,909	1,821	1,006	809	6	1,288	349	939	6,859	18	255	480	911	277
EDUCATION(NOT TEACHING)	1,236	204	119	81	4	410	23	387	516	2	42	58	*	4
HEALTH	1,413	435	234	201	*	218	56	162	687	3	64	2	*	4
DEFENSE	35	*	*	*	*	*	*	*	35	*	*	*	*	*
ENVIRONMENTAL/POLLUTION	142	82	44	38	*	3	3	*	39	6	*	6	*	6
SPACE	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CRIME PREVENTION/CONTROL	737	51	51	*	*	33	33	*	635	*	*	18	*	*
FOOD/OTHER AGR. PRODUCTS	157	29	3	26	*	6	*	6	113	*	*	9	*	*
ENERGY OR FUEL	311	87	20	67	*	4	*	4	164	1	*	55	*	*
OTHER NATURAL RESOURCES	114	*	*	*	*	*	*	*	86	*	*	28	*	*
COMMUNITY DEV./SERVICES	1,056	189	55	134	*	130	53	77	714	*	4	4	*	15
HOUSING	94	*	*	*	*	21	21	*	34	*	*	39	*	*
TRANSP/COMMUNICATIONS	77	*	*	*	*	34	34	*	34	*	9	*	*	*
OTHER	1,798	390	328	62	*	173	38	135	1,086	4	37	73	*	35
NOT EMPLOYED	911	*	*	*	*	*	*	*	*	*	*	*	911	*
NO REPORT	3,828	354	152	200	2	256	88	168	2,716	2	99	188	*	213

* NO CASES REPORTED

TABLE 8-31. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AREA OF
CONTINUED NATIONAL INTEREST, AND PRIMARY WORK ACTIVITY: 1981

FIELD AND AREA OF NATIONAL INTEREST	TOTAL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NOT EM-PLOYED	NO REPORT
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER						
OTHER SOCIAL SCIENTISTS														
TOTAL......................	30,270	2,760	1,371	1,173	216	5,181	1,289	3,892	15,657	725	996	2,601	1,748	602
EDUCATION(NOT TEACHING).	3,509	102	32	49	21	1,477	140	1,337	1,483	94	49	274	*	30
HEALTH..................	1,153	79	51	25	3	320	109	211	549	6	90	109	*	*
DEFENSE.................	1,144	152	25	127	*	230	25	205	564	110	*	88	*	*
ENVIRONMENTAL/POLLUTION.	672	69	54	15	*	114	11	103	418	4	*	36	*	31
SPACE...................	103	*	*	*	*	*	*	*	32	*	*	71	*	*
CRIME PREVENTION/CONTROL	1,504	236	31	205	*	264	109	155	737	32	98	137	*	*
FOOD/OTHER AGR. PRODUCTS	442	67	67	*	*	104	39	65	262	2	*	7	*	*
ENERGY OR FUEL..........	1,397	180	134	41	5	143	125	18	673	60	32	248	*	61
OTHER NATURAL RESOURCES.	422	72	24	48	*	15	11	4	296	*	2	37	*	*
COMMUNITY DEV./SERVICES.	2,193	159	13	134	12	454	155	299	1,196	24	109	211	*	46
HOUSING.................	322	93	3	*	90	90	*	90	97	*	2	40	*	*
TRANSP/COMMUNICATIONS...	1,028	87	33	19	35	204	102	102	609	39	8	81	*	*
OTHER...................	4,759	669	358	311	*	719	270	449	2,529	116	143	492	*	91
NOT EMPLOYED............	1,748	*	*	*	*	*	*	*	*	*	*	*	1,748	*
NO REPORT...............	9,874	795	546	199	50	1,047	193	854	6,212	238	463	770	*	349

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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reproduction of 1981 questionnaire

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1981 Questionnaire 113

Degree and Employment Specialties List 116

List of Federal Supporting Agencies 116

1981 SURVEY OF DOCTORATE RECIPIENTS

OMB No. 3145-0020

CONDUCTED BY THE NATIONAL RESEARCH COUNCIL WITH THE SUPPORT OF THE NATIONAL SCIENCE FOUNDATION, THE NATIONAL ENDOWMENT FOR THE HUMANITIES, THE NATIONAL INSTITUTES OF HEALTH, AND THE DEPARTMENT OF ENERGY

NOTE: THIS INFORMATION IS SOLICITED UNDER THE AUTHORITY OF THE NATIONAL SCIENCE FOUNDATION ACT OF 1950, AS AMENDED. ALL INFORMATION YOU PROVIDE WILL BE TREATED AS CONFIDENTIAL, WILL BE SAFEGUARDED IN ACCORDANCE WITH THE PROVISIONS OF THE PRIVACY ACT OF 1974, AND WILL BE USED FOR STATISTICAL PURPOSES ONLY. INFORMATION WILL BE RELEASED ONLY IN THE FORM OF STATISTICAL SUMMARIES OR IN A FORM WHICH DOES NOT IDENTIFY INFORMATION ABOUT ANY PARTICULAR PERSON. YOUR RESPONSE IS ENTIRELY VOLUNTARY AND YOUR FAILURE TO PROVIDE SOME OR ALL OF THE REQUESTED INFORMATION WILL IN NO WAY ADVERSELY AFFECT YOU.

If your name and address are incorrect, please enter correct information below.

____

____

____

_ _ _ _ _ - _ _ _ _

INCLUDE NEW NINE-DIGIT ZIP CODE IF KNOWN

(10)

If there is an alternate address through which you can always be reached, please provide it on the line below.

____

c/o Number Street City State ZIP Code (11)

1a. How many full-time equivalent years of professional work experience have you had? _____ Year(s) (12-13)

b. Since receiving the doctorate, how many full-time equivalent years of professional work experience have you had? _____ Year(s) (14-15)

c. Since receiving the doctorate, how many full-time equivalent years of work experience, if any, involved teaching? _____ Year(s) (16-17)

2. What was your employment status (includes postdoctoral appointment*) during FEBRUARY 1981?

☐ Circle your selection and enter number from below (18)

1. Employed full-time (Skip to Question #4)
2. Employed part-time
   If you were employed part-time, were you seeking full-time employment? ☐ Yes ☐ No (19)
3. Postdoctoral appointment*
   If you held a postdoctoral appointment, was it ☐ full-time (Skip to Question #4) ☐ part-time (20)
4. Unemployed and seeking employment
5. Not employed and not seeking employment
6. Retired and not employed

(4–6: Skip to Question #20)

7. Other, specify ____________________

*Temporary appointment in academia, industry or government, the primary purpose of which is to provide for continued education or experience in research.

3. If you were employed part-time during FEBRUARY 1981, what was the MOST important reason for being in that position?

☐ Enter number from below (21)

1. Part-time employment preferred
2. Full-time position not available
3. Constraints due to family or marital status
4. Other, specify ____________________

4. From the Degree and Employment Specialties List on page 4 select and enter both the number and title of the employment specialty most closely related to your principal employment or postdoctoral appointment during FEBRUARY 1981. Write in your specialty if it is not on the list.

____

Number Title of Employment Specialty (22-24)

5. If you were employed during FEBRUARY 1981 in a specialty field other than your field of Ph.D., what was the MOST important reason for being in that position?

☐ Enter number from below (25)

1. Better pay
2. More attractive career options
3. Preferred specific geographic location
4. Constraints due to family or marital status
5. Position in Ph.D. field not available
6. Promoted out of position in Ph.D. field
7. Other, specify ____________________

6. Please give the name of your principal employer (company, organization, postdoctoral institution, etc. or, if self employed, write "self") and actual place of employment during FEBRUARY 1981.

____

Name of Employer (26-31)

____

Number Street

____

City State

____

ZIP Code (32-40)

7. Which category below best describes the type of organization of your principal employment OR postdoctoral appointment during FEBRUARY 1981?

☐ Enter number from below (41-42)

1. Business or industry (including self-employed)
2. Junior college, 2-year college, technical institute
3. Medical school (including university affiliated hospital or medical center)
4. 4-year college
5. University, other than medical school
6. Elementary or secondary school system
7. Private foundation
8. Hospital or clinic
9. U.S. military service, active duty, or Commissioned Corps, e.g., USPHS, NOAA
10. U.S. government, civilian employee
11. State government
12. Local or other government, specify: ______________________
13. Nonprofit organization, other than those listed above
14. Other, specify ______________________

8. What were your primary and secondary work activities during FEBRUARY 1981? (Enter number from the list provided below)

☐ Primary (43-44) ☐ Secondary (45-46)

1. Teaching
2. Basic research
3. Applied research
4. Development of equipment, products, systems, data
5. Design
6. Writing
7. Editing
8. Professional services to individuals

Management or administration of:

9. Research and development
10. Educational programs
11. Other

12. Consulting
13. Production
14. Cultural resources
15. Archival work
16. Curatorial work
17. Performing arts
18. Quality control, inspection, testing
19. Sales, marketing, purchasing, estimating
20. Other, specify ______________________

9. What was the basic annual salary* associated with your principal professional employment during FEBRUARY 1981? If you were on a postdoctoral appointment (see question #2 for definition), what was your stipend plus allowances? $ ______________ per year (47-49)

Check whether salary was for ☐ 9-10 months or ☐ 11-12 months (50)

*Basic salary is your annual salary before deductions for income tax, social security, retirement, etc., but does not include bonuses, overtime, summer teaching, or other payment for professional work.

10a. What was your basic annual salary* for the year ending December 31, 1980? $ ______________ per year (51-53)

Check whether salary was for ☐ 9-10 months or ☐ 11-12 months (54)

b. What was your gross professional income† for the year 1980? $ ______________ per year (55-57)

†Gross professional income is all payments received for professional activities including basic salary before deductions plus bonuses, consulting fees, honoraria, royalties, rental and subsistence allowances, etc.

11. What percentage of your professional work time did you devote to each of the following activities during FEBRUARY 1981? (Total should equal 100%)

%			%		
1. ______	(58)	Management or administration of R&D	7. ______	(70)	Consulting
2. ______	(60)	Management or administration of educational programs	8. ______	(72)	Writing/editing
3. ______	(62)	Management or administration of other programs	9. ______	(74)	Development/design
4. ______	(64)	Teaching	10. ______	(76)	Cultural resources
5. ______	(66)	Applied research	11. ______	(78)	Other, specify ______________
6. ______	(68)	Basic research			

12. If you were employed by an academic institution during FEBRUARY 1981, did you hold a tenured position? 1 ☐ Yes 2 ☐ No (10)

If YES, what year was tenure granted? __________ (11-12)

If NO, did you hold a tenure-track position? 1 ☐ Yes 2 ☐ No (13)

13. If you wereemployed by an academic institution during FEBRUARY 1981, what was the rank of your position? ☐ Enter number from below (14)

Faculty

1. Professor
2. Associate professor
3. Assistant professor
4. Instructor
5. Administrator
6. Other, specify ______________ *Title*

Non-Faculty

7. Teaching staff
8. Research staff
9. Other, specify ______________ *Title*

14. Was any of your work during FEBRUARY 1981 supported or sponsored by U.S. Government funds?

1 ☐ Yes 2 ☐ No 3 ☐ Don't Know (15)

If YES, which federal agencies or departments were supporting the work?

Enter number(s) from the List of Federal Supporting Agencies on page 4. ______________________ (16-39)

15. How important was your DOCTORAL degree in enabling you to attain your present position? (Check only one)

1 ☐ Essential qualification
2 ☐ Helpful, but not essential
3 ☐ Unimportant
4 ☐ Cannot ascertain (40)

16. Listed below are selected topics of national interest. If you devoted a proportion of your professional time which you considered significant to any of these problem areas during FEBRUARY 1981, please give the corresponding number of the ONE on which you spent the MOST time.

☐ Enter number from below (41-42)

1. Energy or fuel
2. Health
3. Defense
4. Environ. protection, pollution control
5. Education (other than teaching)
6. Space
7. Crime prevention and control
8. Food and other agricultural products
9. Natural resources, other than fuel or food
10. Community development and services
11. Housing (planning, design, construction)
12. Transportation, communications
13. Cultural life
14. Other area, specify ____________

If you did not select energy or fuel (category #1) in question #16, please skip to question #20.

17. From the list below, give the corresponding number of the ONE energy source that involved the LARGEST proportion of your energy-related work during FEBRUARY 1981.

☐ Enter number from below (43)

1. Coal and coal products
2. Petroleum (including oil shale and tar sands) or natural gas
3. Fission
4. Fusion
5. Hydroenergy
6. Direct solar (including space and water heating, thermal, electric)
7. Indirect solar (winds, tides, biomass, etc.)
8. Geothermal
9. Other, specify ____________

18. Please read the following list of energy-related activities and give the corresponding number(s) from the list below of the activity(ies) in which you were engaged during FEBRUARY 1981. Enter number(s) from below ____________ (44-63)

1. Exploration
2. Extraction (gas, oil, mining)
3. Manufacture of energy-related components or products
4. Fuel processing (including refining and enriching)
5. Electric power generation
6. Transportation, transmission, distribution of fuel or energy
7. Energy storage
8. Energy utilization, management
9. Fuel reprocessing or disposal
10. Energy conservation
11. Environmental impact (health, economic, etc.)
12. Education, training
13. Research and development
14. Other, specify ____________

19. Please enter the number 1-14 from question #18 that BEST describes the activity in which you spent MOST of your energy-related time. ☐ (64-65)

20. What is the major field of your doctorate? Please use the Specialties List on page 4. Please provide the name of the institution where the degree was earned and the year the degree was granted.

____

Ph.D. Field (66-68) Month and Year Granted (69-71) Institution (72-77)

21. Date of Birth

Mo. Day Year

___ ___ ___ (10-14)

22. Citizenship

1 ☐ U.S. Native Born
2 ☐ U.S. Naturalized
3 ☐ Non-U.S., Immigrant (Perm. Res.)
4 ☐ Non-U.S., Immigrant (Temp. Res.) (15)

IF NON-U.S., specify country of citizenship ____________ (16-17)

23a. What is your marital status?

1 ☐ Now Married
2 ☐ Widowed
3 ☐ Never Married
4 ☐ Divorced, separated (18)

23b. Do you have any children living with you who are:

Under 6 years of age? 1 ☐ Yes How many? ______ 2 ☐ No (19-20)

Between 6 and 18 years of age? 1 ☐ Yes How many? ______ 2 ☐ No (21-22)

24. Are you physically handicapped? 1 ☐ Yes 2 ☐ No (23) If Yes, enter number(s) from below ____________ (24-27)

1. Visual 2. Auditory 3. Ambulatory 4. Other, specify ____________

25a. What is your racial background?

1 ☐ American Indian or Alaskan Native
2 ☐ Asian or Pacific islander
3 ☐ Black
4 ☐ White (28)

25b. Is your ethnic heritage Hispanic?

1 ☐ Yes
2 ☐ No (29)

If Yes, is it:
1 ☐ Mexican-American
2 ☐ Puerto Rican
3 ☐ Other Hispanic (30)

Thank you for completing this questionnaire. Please return the completed form in the enclosed envelope to the Commission on Human Resources, JH638, National Research Council, 2101 Constitution Avenue, Washington, D.C. 20418.

DEGREE AND EMPLOYMENT SPECIALTIES LIST

MATHEMATICAL SCIENCES

000 - Algebra
010 - Analysis & Functional Analysis
020 - Geometry
030 - Logic
040 - Number Theory
052 - Probability
055 - Math Statistics (see also 544, 670, 725, 727)
060 - Topology
082 - Operations Research (see also 478)
085 - Applied Mathematics
089 - Combinatorics & Finite Mathematics
091 - Physical Mathematics
098 - Mathematics, General
099 - Mathematics, Other*

COMPUTER SCIENCES

071 - Theory
072 - Software Systems
073 - Hardware Systems
074 - Intelligent Systems
079 - Computer Sciences, Other (see also 437, 476)

PHYSICS & ASTRONOMY

101 - Astronomy
102 - Astrophysics
110 - Atomic & Molecular
120 - Electromagnetism
130 - Mechanics
132 - Acoustics
134 - Fluids
135 - Plasma
136 - Optics
138 - Thermal
140 - Elementary Particles
150 - Nuclear Structure
160 - Solid State
198 - Physics, General
199 - Physics, Other*

CHEMISTRY

200 - Analytical
210 - Inorganic
215 - Synthetic Inorganic & Organometallic
220 - Organic
225 - Synthetic Organic & Natural Products
230 - Nuclear
240 - Physical
245 - Quantum
250 - Theoretical
255 - Structural
260 - Agricultural & Food
265 - Thermodynamics & Material Properties
270 - Pharmaceutical
275 - Polymers
280 - Biochemistry (see also 540)
285 - Chemical Dynamics
298 - Chemistry, General
299 - Chemistry, Other*

EARTH, ENVIRONMENTAL AND MARINE SCIENCES

301 - Mineralogy, Petrology
305 - Geochemistry
310 - Stratigraphy, Sedimentation
320 - Paleontology
330 - Structural Geology
341 - Geophysics (Solid Earth)
350 - Geomorph. & Glacial Geology
391 - Applied Geol., Geol. Engr. & Econ. Geol.
395 - Fuel Tech. & Petrol. Engr. (see also 479)
360 - Hydrology & Water Resources
370 - Oceanography
397 - Marine Sciences, Other*
381 - Atmospheric Physics & Chemistry
382 - Atmospheric Dynamics
383 - Atmospheric Sciences, Other*
388 - Environmental Sciences, General (see also 480, 528)
389 - Environmental Sciences, Other*
398 - Earth Sciences, General
399 - Earth Sciences, Other*

ENGINEERING

400 - Aeronautical & Astronautical
410 - Agricultural
415 - Biomedical
420 - Civil
430 - Chemical
435 - Ceramic
437 - Computer
440 - Electrical
445 - Electronics
450 - Industrial & Manufacturing
455 - Nuclear
460 - Engineering Mechanics
465 - Engineering Physics
470 - Mechanical
475 - Metallurgy & Phys. Met. Engr.
476 - Systems Design & Systems Science (see also 072, 073, 074)
478 - Operations Research (see also 082)
479 - Fuel Technology & Petrol. Engr. (see also 395)
480 - Sanitary & Environmental
486 - Mining
497 - Materials Science
498 - Engineering, General
499 - Engineering, Other*

AGRICULTURAL SCIENCES

500 - Agronomy
501 - Agricultural Economics
502 - Animal Husbandry
503 - Food Science and/or Technology (see also 573)
504 - Fish & Wildlife
505 - Forestry
506 - Horticulture
507 - Soils & Soil Science
510 - Animal Science & Animal Nutrition
511 - Phytopathology
518 - Agriculture, General
519 - Agriculture, Other*

MEDICAL SCIENCES

520 - Medicine & Surgery
522 - Public Health & Epidemiology
523 - Veterinary Medicine
524 - Hospital Administration
526 - Nursing
527 - Parasitology
528 - Environmental Health
534 - Pathology
536 - Pharmacology
537 - Pharmacy
538 - Medical Sciences, General
539 - Medical Sciences, Other*

BIOLOGICAL SCIENCES

540 - Biochemistry (see also 280)
542 - Biophysics
543 - Biomathematics
544 - Biometrics and Biostatistics (see also 055, 670, 725, 727)
545 - Anatomy
546 - Cytology
547 - Embryology
548 - Immunology
550 - Botany
560 - Ecology
562 - Hydrobiology
564 - Microbiology & Bacteriology
566 - Physiology, Animal
567 - Physiology, Plant
569 - Zoology
570 - Genetics
571 - Entomology
572 - Molecular Biology
573 - Food Science and/or Technology (see also 503)
574 - Behavior/Ethology
576 - Nutrition & Dietetics
578 - Biological Sciences, General
579 - Biological Sciences, Other*

PSYCHOLOGY

600 - Clinical
610 - Counseling & Guidance
620 - Developmental & Gerontological
630 - Educational
635 - School Psychology
641 - Experimental
642 - Comparative
643 - Physiological
650 - Industrial & Personnel
660 - Personality
670 - Psychometrics (see also 055, 544, 725, 727)
680 - Social
698 - Psychology, General
699 - Psychology, Other*

SOCIAL SCIENCES

700 - Anthropology
703 - Archeology
708 - Communications*
709 - Linguistics
710 - Sociology
720 - Economics (see also 501)
725 - Econometrics (see also 055, 544, 670, 727)
727 - Social Statistics (see also 055, 544, 670, 725)
740 - Geography
745 - Area Studies*
751 - Political Science
752 - Public Administration
755 - International Relations
760 - Criminology & Criminal Justice
770 - Urban & Regional Planning
775 - History & Philosophy of Science
798 - Social Sciences, General
799 - Social Sciences, Other*

HUMANITIES

802 - History & Criticism of Art
804 - History, American
805 - History, European
806 - History, Other*
808 - American Studies
809 - Theater & Theater Criticism
830 - Music
831 - Speech as a Dramatic Art (see also 885)
834 - Philosophy
838 - Comparative Literature
891 - Library & Archival Sciences
878 - Humanities, General
879 - Humanities, Other*

LANGUAGES & LITERATURE

811 - American
812 - English
821 - German
822 - Russian
823 - French
824 - Spanish & Portuguese
826 - Italian
827 - Classical*
829 - Other Languages*

EDUCATION & OTHER PROFESSIONAL FIELDS

801 - Art, Applied
833 - Religion
881 - Theology
882 - Business Administration
883 - Home Economics
884 - Journalism
885 - Speech & Hearing Sciences (see also 831)
886 - Law, Jurisprudence
887 - Social Work
897 - Professional Field, Other*
938 - Education (other than teaching in a field listed above)

899 - Other Fields*

*Identify the specific field in the space on the questionnaire.

LIST OF FEDERAL SUPPORTING AGENCIES (For use with #14)

1 Agency for International Development
2 Environmental Protection Agency
3 National Aeronautics & Space Administration
4 National Endowment for the Arts
5 National Endowment for the Humanities
6 National Science Foundation
7 Nuclear Regulatory Commission
8 Smithsonian Institution
9 Department of Agriculture
10 Department of Commerce
11 Department of Defense
12 Department of Energy
13 National Institutes of Health (DHHS)
14 Alcohol, Drug Abuse & Mental Health Administration (NIAA, NIDA, NIMH)
15. Other DHHS, specify ______
16. National Institute of Education (E.D.)
17. Other Department of Education (E.D.)
18 Department of Housing and Urban Development
19 Department of the Interior
20 Department of Justice
21 Department of Labor
22 Department of State
23 Department of Transportation
24 Other agency or department, specify ______

25 Don't know source agency

other science resources publications

Science Resources Studies Highlights

R&D Funds

	NSF No.	Price
"Growth in Federal Basic Research Support in 1980-83 Moves at Slower Rate than in Previous Four Years"	82-325	-----
"Companies Plan R&D Expenditure Increases for 1983: Growth Rate Down"	82-324	-----
"Defense Leads R&D Growth in FY 1983—Energy and Natural Resources and Environment Fall Sharply"	82-322	-----
"Universities Spent 6% of Separately Budgeted R&D Expenditures for Research Equipment in 1980"	82-316	-----
"National R&D Expenditures Expected to Reach $85 Billion in 1983"	82-311	-----

S/E Personnel

	NSF No.	Price
"Labor Market Slackens for New Science and Engineering Graduates"	82-320	-----
"Labor Markets for New Science and Engineering Graduates in Private Industry"	82-310	-----
"Graduate Science/Engineering Enrollment Up Another 3% Between 1979 and 1980"	82-306	-----
"Engineering Colleges Report 10% of Faculty Positions Vacant in Fall 1980"	81-322	-----

Detailed Statistical Tables

R&D Funds

	NSF No.	Price
Federal Funds for Research and Development, Fiscal Years 1981, 1982, and 1983, Volume XXXI	82-326	-----
Research and Development in Industry, 1980. Funds, 1980; Scientists and Engineers, January 1981	82-317	-----
Academic Science: R&D Funds, Fiscal Year 1980	82-300	-----

S/E Personnel

	NSF No.	Price
Academic Science: Scientists and Engineers, January 1981	82-305	-----
Academic Science: Graduate Enrollment and Support, Fall 1980	81-330	-----
Scientists, Engineers, and Technicians in Private Industry, 1980	81-329	-----
Federal Scientific and Technical Personnel, 1976, 1977, and 1978	81-309	-----
Scientists and Engineers From Abroad, 1976-78	80-324	-----

Reports

R&D Funds

	NSF No.	Price
1990 R&D Funding Projections	82-315	$3.50
Federal Support to Universities, Colleges, and Selected Nonprofit Institutions, Fiscal Year 1980	82-308	$6.50
Problems of Small, High-Technology Firms	81-302	-----

S/E Personnel

	NSF No.	Price
Women and Minorities in Science and Engineering	82-302	$7.00
Science and Engineering Degrees: 1950-80. A Source Book	82-307	-----
Activities of Science and Engineering Faculty in Universities and 4-Year Colleges, 1978/79	81-323	-----
The Stock of Science and Engineering Master's Degree-Holders in the United States	81-302	-----

Composite

	NSF No.	Price
National Patterns of Science and Technology Resources, 1982	82-319	$5.00
Academic Science: 1972-81. R&D Funds, Scientists and Engineers, Graduate Enrollment and Support	81-326	-----

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